

DISEASES of the CHEST

VOLUME X

JULY-AUGUST, 1944

NUMBER 4

New Growths of the Chest*

LT. COL. CARL W. TEMPEL, M.C.**
Washington, D. C.

INDEX

	Page
Introduction	278
Classification of tumors of the chest	279
Diagnostic criteria	281
Case presentations—diagnostic and therapeutic problems:	
1. A circumscribed pulmonary lesion believed to be an inflammatory mass or cyst, lower lobe, right, of unknown etiology. Considered a benign pulmonary tumor until the lesion disappeared spontaneously	285
†2. A circumscribed pulmonary lesion believed to be an inflammatory mass or cystic lesion, upper lobe, left, of unknown etiology. Considered a benign tumor until the lesion underwent gradual resolution	286
3. Cystic disease of the lung. Presented to show the tumor-like mass on x-ray of the chest, as compared with the cystic appearance of the lesion when empty	289
†4. Hilar and mediastinal lymph gland enlargement due to sarcoidosis. Considered in differential diagnosis of lymphoblastoma	291
†5. Atelectasis of the right lower lobe with associated bronchiectasis, simulating bronchial obstruction by tumor, treated by lobectomy. Proven to be tuberculous after operation	293
†6. Elevation of the left diaphragm by tumor mass. Demonstrating use of diagnostic pneumoperitoneum in proving the lesion sub-diaphragmatic	296
7. Bronchogenic cyst of the anterior mediastinum, treated successfully by surgery	297
8. Neurofibroma involving the vagus and sympathetic nerves; treated successfully by surgical removal	299

*Presented before the Southern Chapter, American College of Chest Physicians, Cincinnati, Ohio, November 17, 1943.

**Walter Reed General Hospital.

†Cases not presented at meeting due to time limit of 15 minutes.

	Page
9. Large solid tuberculous glands, posterior mediastinum, with findings suggestive of neurofibroma. Pressure symptoms necessitated surgical removal. Operation successful	302
10. Squamous cell bronchial carcinoma, main bronchus, left lower lobe. Demonstrating slow clinical course and successful treatment by surgery	304
11. Undifferentiated cell type of bronchial carcinoma, main bronchus, right upper lobe. Demonstrating rapid fatal clinical course and similarity to pneumonia	306
12. Bronchial carcinoma, main bronchus, left upper lobe, with marked secondary cavity formation, due to bronchial occlusion, mistaken for pulmonary abscess. Diagnosis made by cervical lymph gland biopsy	308
†13. Neoplastic lesion, believed to be choronepithelioma, right lung. Demonstrating use of diagnostic pneumothorax and study of pleural fluid for cancer cells	309
Conclusion	311

INTRODUCTION

The diagnosis and treatment of new growths of the chest requires close cooperation between the internist, the endoscopist, the roentgenologist, the pathologist and the surgeon. No field of special clinical study offers more difficult or interesting problems in diagnosis than can be found in the study of chest tumors.

It is gratifying to note that the surgical treatment of neoplasms of the chest has advanced remarkably in the last decade. From a field of almost hopeless endeavor modern surgery of the chest is now producing splendid results and holds out much promise for future development. Much of the advancement in treatment, and certainly the improved results of surgery for malignancies of the chest are based largely upon the earlier differentiation of neoplastic diseases. Dangerous delays in diagnosis occur because of the similarity of tumors and certain common thoracic diseases, such as tuberculosis, pneumonia, abscess, localized atelectasis, bronchiectasis, encapsulated effusion, and non-neoplastic growths of mediastinal lymph nodes. Because of the importance of the time element in the study of questionable pulmonary tumors, one must not wait too long before recommending operations, yet on the other hand, to rush into surgery without a reasonable period of observation in questionable cases is unjustifiable. The important thing to remember, therefore, is that we must constantly endeavor to improve our diagnostic acumen and to institute surgical treatment early when indicated.

In the discussion of new growths of the chest I will present first a working classification to indicate the type of lesion that must be considered in differential diagnoses. I will then give the criteria useful in making a diagnosis and finally present such cases as are

demonstrative of diagnostic and therapeutic problems as seen at our hospital. I will limit the discussion to primary new growths but cases will be shown to demonstrate non-neoplastic lesions simulating new growths to emphasize their importance in differential diagnosis.

CLASSIFICATION OF NEW GROWTHS OF THE CHEST

The following is a summary of new growths of the chest that must be considered in differential diagnosis.

1. Tumors of the large or major bronchi (predominant sites).
 - a. Carcinomas.
 - 1) Squamous cell. These are relatively slow growing, but may produce symptoms early because of atelectasis and suppuration.
 - 2) Small cell type, including the undifferentiated cell type, the oat cell, and the transitional cell. These are rapidly growing and produce symptoms early, especially by pressure.
 - b. Adenomas (mixed tumor). An epithelial tumor which is usually benign but is potentially malignant.
2. Tumors of minor bronchi or periphery of the lung (predominant sites).
 - a. Adenocarcinoma. These are rapidly growing although local symptoms may occur late.
 - b. Superior pulmonary sulcus tumor (Pancoast). Usually a bronchial carcinoma, but it may be a neurofibroma, or other type.
3. Anterior mediastinal tumors.
 - a. Malignant lymphomas (often called lymphoblastoma).
 - 1) Lymphosarcoma.
 - 2) Hodgkin's disease.
 - 3) Leukemia.
 - 4) Giant follicular lymphocytoma.
 - b. Thymomas. Usually lymphosarcoma; occasionally carcinoma.
 - c. Teratoid tumors (dermoids and teratomas).
 - d. Cysts of mediastinum.
 - 1) Called various names, such as cystic hygroma, cystic lymphangioma, ciliated epithelium cysts. Origin often doubtful but may be from bronchi or pericardium. Cysts of bronchogenic epithelium usually called bronchogenic cysts.
4. Posterior mediastinal tumors.
 - a. Primary neuromas.

- 1) Classified as to origin as neurofibroma, ganglioneuroma, neurogenic sarcoma and sympatheticoblastoma.
5. Rare mediastinal tumors.
 - a. Fibromas and sarcomas.
 - 1) Difficult to diagnose as they may be confused with tumors of nerve, connective tissue elements of lymph nodes or thymus, periosteum of ribs, etc.
 - b. Carcinoma.
 - 1) Origin usually in doubt but may arise from thymus or lung. Mediastinal carcinomas are usually metastatic.
 - c. Tumors arising from bone and cartilage (ribs, sternum or spine).
 - 1) Chondroma, osteochondroma, chondromyxoma, enchondroma, chondromyxosarcoma. These are more commonly located in a posterior position except for chondromas.
 - d. Intrathoracic cysts of intestinal structures and intrathoracic stomach.
 - e. Lipomas.
 - f. Xanthomas.
6. Tumors originating in chest wall, (ribs, pleura or nerves).
 - a. Benign tumors: Chondromas, fibromas, osteomas, and giant cell tumors. Often manifested as intrathoracic masses.
 - b. Malignant tumors: Osteogenic sarcoma, neurogenic sarcoma and multiple myeloma.
 - c. Tumors of pleura. May be benign or malignant, primary or metastatic and include: Fibromas, myxomas, angiomas and various types of sarcomas, (round cell, spindle cell, fibrosarcoma and myxosarcoma).
7. Non-neoplastic lesions, often circumscribed, that may be confused with new growths.
 - a. Cysts.
 - 1) Congenital.
 - 2) Developmental.
 - 3) Acquired inflammatory.
 - 4) Echinococccic.
 - b. Circumscribed inflammatory mass within the lung.
 - 1) Tuberculous (tuberculoma).
 - 2) Non-tuberculous.
 - c. Lymphatic gland enlargement.
 - 1) Solid or abscessed mass of tuberculous hilar or mediastinal lymph nodes.
 - 2) Boeck's sarcoid.
 - 3) Benign enlargement of unknown etiology.
 - a) Simple asymptomatic enlargement of glands, pre-

sumably inflammatory, non-suppurative, stable on serial x-ray study, insensitive to roentgen therapy, with or without positive tuberculin.

- d. Atelectasis of a lobe or part of a lobe.
- e. Aneurisms of the great vessels and the heart.
- f. Lesions of the diaphragm.
 - 1) Herniation.
 - 2) Eventration.
- g. Mega-esophagus.
- h. Encapsulated empyema.
- i. Abscess: Mediastinal and Pott's.
- j. Mediastinal thyroids (usually cervical goiter is also present).

DIAGNOSTIC CRITERIA

Aside from the diagnosis of malignancy from a microscopic study of the tumor, or from a demonstrable metastasis, there is no reliable criteria from which the benign or malignant character of a chest tumor can be determined. Indeed it is often impossible to determine if one is dealing with a new growth at all. Because of the difficulties in diagnosis it seems important to review briefly the criteria that are useful in the diagnosis of chest tumors.

- 1. Pathological diagnosis by biopsy and cell study.
 - a. Endoscopically from bronchial or esophageal lesion.
 - b. From axillary, cervical or other lymph nodes.
 - c. Aspiration or punch biopsy direct from tumor.
 - d. Aspiration of pleural fluid for study of cancer cells.
 - e. Concentration of sputum for cancer cells.
- 2. X-ray studies of the chest.
 - a. First of all secure all available x-ray films of the chest for serial study. This is most important.
 - b. Stereoscopic, lateral and oblique roentgenograms.
 - 1) Most circumscribed intrapulmonary neoplasms are malignant bronchogenic carcinomas. If multiple, they are usually metastatic.
 - 2) Most neoplasms that are not well circumscribed are malignant, but the loss of sharp definition at the edge of the tumor may be due to inflammatory changes or atelectasis in the adjacent lung. The x-ray findings in the majority of bronchogenic tumors are those of atelectasis or other secondary changes.
 - 3) Circumscribed extrapulmonary neoplasms in the costovertebral region are usually neurofibromas and those in the anterior half of the chest are usually teratomas.
 - 4) Atelectasis from an x-ray standpoint may be divided into

three general types, depending on the degree and location of the obstruction by tumor.

- a) Partial obstruction of any large bronchus. The lung involved becomes less radiant and usually shows linear areas of increased density.
- b) Complete obstruction of a secondary bronchus. The collapsed portion of the lung usually appears as a dense triangular area along the diaphragm, heart and spine.
- c) Complete occlusion of the right or left main bronchus. The entire half of the chest is extremely dense. The mediastinum is displaced into the involved lung field, the intercostal spaces are narrowed and the diaphragm is elevated.
- c. Diagnostic pneumothorax.
 - 1) Of value to distinguish between pulmonary, mediastinal or thoracic wall tumors.
- d. Diagnostic pneumoperitoneum.
 - 1) Of value to distinguish between supradiaphragmatic and subdiaphragmatic lesions, including herniation.
- e. Tomography.
 - 1) It may be possible to demonstrate the relationship of the tumor to the bronchus.
- f. Bronchography (lipiodol injection).
 - 1) Lipiodol may be used to demonstrate the level and extent of the bronchial occlusion as well as the condition of the lung beyond the tumor.
- g. Fluoroscopy.
 - 1) Of value to determine if masses are expansile, such as aneurisms.
 - 2) An aid in the location of tumors.
 - 3) Of value to determine the relationship of a tumor to structures such as the diaphragm. Tumors in the lower part of the chest, not in continuity with the diaphragm, will usually descend with the lung during inspiration if they are intrapulmonary. In herniation a GI series is helpful.
 - 4) For mobility of the diaphragm. If the diaphragm is paralyzed it usually means the phrenic nerve is involved by the tumor and that the case is inoperable.
- 3. Therapeutic test dose of deep roentgenotherapy for lymphoblastoma.
 - a. Response indicates the probable presence of a lymphoblastoma and constitutes the only indication for x-ray in possible

operable thoracic neoplasms. A response is usually an indication that surgery is not warranted.

4. X-ray study for non-pulmonary malignancies.
 - a. If the pulmonary lesion is suspected to be metastatic the x-ray studies of possible primary sites should include: Pyelograms and x-rays of bone (ribs, sternum, vertebra and pelvis).
5. Bronchoscopy and esophagoscopy.
 - a. Direct visualization of tumor for size, location, character and for biopsy.
 - 1) Appearance of adenoma: Smooth, pink, oval or lobulated; often pedunculated. Bronchus not fixed. Troublesome bleeding on biopsy.
 - 2) Appearance of carcinoma: Irregular, yellowish or gray; often ulcerated; bronchus infiltrated and often fixed. Bleed readily but not profusely. About 70 per cent of carcinomata of the lung arise in the large bronchi and from these bronchoscopic biopsy may be obtained.
6. Surgical exploration.
 - a. As certain benign growths may become malignant and as many malignant growths may be completely removed, those cases diagnosed as thoracic tumors should be surgically explored if there is no evidence of metastasis and other conditions are favorable.
7. Laboratory tests to rule out non-neoplastic diseases.
 - a. Tuberculosis: Sputum and gastric lavage for tubercle bacilli, tuberculin test.
 - b. Leukemia: Hemograms.
 - c. Thyroid tumors: Basal metabolic rate, blood chemistry.
 - d. Syphilis: Serological tests.
8. Kymographic test.
 - a. Useful to determine if mediastinal mass has expansile or transmitted pulsations.
9. Thoracoscopy after aspiration of fluid and injection of air.
 - a. Rarely useful but may be helpful in the diagnosis of a pleural implantation of a malignant tumor.
10. Symptoms and signs of diagnostic importance.
 - a. The symptoms may be similar to those of tuberculosis, pneumonia, abscess or bronchiectasis and, therefore, of no diagnostic value. The persistence of symptoms or recurrent episodes, however, should make one think of new growths. If intermittent attacks of suppuration with long healthy intervals occur, one must think of adenoma, while if the suppuration or atelectasis is progressive, carcinoma is a more likely

cause of the symptoms. The important thing to remember is to consider tumors as well as an inflammatory process as the cause of symptoms.

- b. Symptoms and signs pointing to extrapulmonary lesions are very important diagnostic criteria. This includes especially the lymph glands, kidneys, prostate, liver, spleen, bones, breasts, uterus and testes.
- c. When the bronchi are involved, the symptoms are based on the amount of erosion, obstruction, atelectasis, bronchiectasis or abscess formation that develops.
- d. If a silent area of a lung is involved there may be no symptoms and the first indication of tumor may be found accidentally by x-ray or by cervical gland metastasis.
- e. If the pleura is involved, pleurisy with effusion or hemothorax will be a prominent symptom.
- f. The symptoms may suggest heart disease due to the invasion of the heart or covering, by direct pressure upon, or rotation of, the heart.
- g. The type of hemoptysis if present may be suggestive. In adenoma it often is profuse with sudden beginning and abrupt cessation, while in carcinoma there is usually only streaking which is often continuous.
- h. A symptom complex of unilateral shoulder girdle pain, Horner's syndrome, paresis of the hand, x-ray mass posterior superior sulcus of the chest, is usually indicative of a Pancoast's tumor.
- i. Certain symptoms suggest inoperability: Dysphagia, paralysis of recurrent laryngeal or phrenic nerve, Horner's syndrome, serous or hemorrhagic pleural fluid, dilated superficial veins, sudden increase in size of tumor, severe pain and rapid loss of weight.
- j. Age of onset of symptoms: If recurrent pulmonary symptoms occur in a young female, think of adenoma, but if progressive symptoms are noted in a man past forty, think of carcinoma. Ninety per cent of carcinomas of the lung occur after 40 years of age and 85 per cent are males. Eighty per cent of adenoma occur under 40 years of age and 70 per cent are females.

11. The time element. Proper period of observation.

- a. The old adage that "Time solves everything" is true in the progress study of new growths of the chest. The time element is so important, however, that we are justified in continued observation only after a most rigid analytical study of the case has proven this course justified.

CASE I

A circumscribed pulmonary lesion believed to be an inflammatory mass or cyst, lower lobe, right, of unknown etiology. Considered a benign pulmonary tumor until the lesion, as seen by x-ray, disappeared spontaneously.

N. B., white male, age 47; Register No. 178401.

History and Physical Findings—Patient was admitted to the hospital January, 1941, with a history of chronic, slightly productive cough, slight loss of weight and dyspnea on exertion. There was no history of chest pain, hemoptysis, hoarseness or ankle edema. For many years he weighed 220 pounds but at the time of admission he weighed 196 pounds. The history was otherwise irrelevant except that he had pneumonia in 1937.

The physical findings were essentially negative except for the chest. The thorax was somewhat emphysematous, mobility was somewhat impaired, the breath sounds were rough especially in the right base which also manifested rhonchi.

Bronchoscopy revealed congestion and thickening of the mucosa, larynx and trachea. Thick mucoid secretions were aspirated from the right lower lobe.

Laboratory and X-ray Findings—Blood counts, urinalyses, serology, sputum, analyses for fungi and tuberculosis were negative or within normal limits. Blood chemistry revealed mild hyperglycemia (130 mg. to 180 mg.) in January, 1941, but studies including glucose tolerance were normal in December, 1941.

X-ray of the chest 1/23/41 revealed a dense circumscribed density about

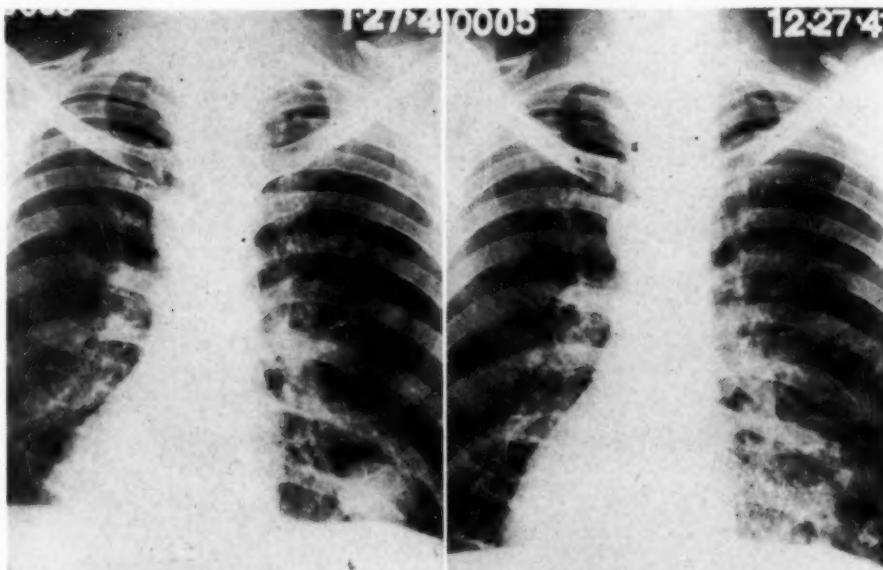


Fig. 1

CASE I

Fig. 2

Fig. 1—X-ray of the chest 27 January 1941, showing circumscribed density, right lower lobe. Fig. 2—X-ray of the chest 27 December 1941, density no longer visible. Lipiodol still visible right lower lobe.

4 cms. in diameter in the right lower lung field anteriorly. The impression of the roentgenologist was "benign tumor." Lipiodol injection revealed no bronchial connection to the mass. X-ray 12/27/41 revealed that the density previously mentioned had disappeared. Lipiodol studies 1/19/42 revealed no bronchial pathology.

Progress While Under Observation—The patient was observed in hospital from January 9, 1941, to March 25, 1941, and again from December 26, 1941, to March 9, 1942. The findings during the first hospitalization were considered to be those of a benign tumor and the patient was returned to duty under medical supervision. On return to the hospital in December for recheck, the density, right lower lobe, was no longer found present, but the symptoms of mild bronchitis continued. He was non-toxic and his general condition was good at the time of his return to duty.

Diagnoses—(1) Tracheobronchitis, chronic, catarrhal, moderate, cause undetermined. (2) Circumscribed, non-neoplastic lesion, presumably an inflammatory mass or cyst within the lung involving the right lower lobe, chronic, cause and duration undetermined.

Comments on Case—This patient demonstrated a diagnostic and therapeutic problem. He made a good recovery as far as the supposed tumor, right lower lobe, was concerned on a conservative plan of therapy but the presence of a chronic bronchitis may well lead to a recurrence. Without a pathological diagnosis we assumed that the circumscribed lesion, right lower lobe, was either an inflammatory mass or an accumulation of fluid in an area of cyst-like cavitation resulting from a blocked bronchus. In a case of this kind it is obviously very difficult to rule out a neoplasm or decide on how long to wait before recommending an exploratory operation. Amongst the diagnoses suggested by consultants were the following: Benign tumor; cyst, probably acquired pneumatocele following pneumonia, 1927; metastatic carcinoma; primary healed tuberculous focus; healed and probably calcified abscess of the lung.

CASE II

A circumscribed pulmonary lesion believed to be an inflammatory mass or cystic lesion, upper lobe, left, of unknown etiology. Considered a benign tumor until the lesion underwent gradual resolution.

H. D., male, age 48; Register No. 177249.

History and Physical Findings—An x-ray film of 4/7/41, taken for routine physical examination, revealed a homogenous circumscribed soft tissue density of 4 cms. in the left second interspace laterally. He was admitted to Walter Reed General Hospital 10/16/41 for treatment and was discharged 4/8/42. There were few chest symptoms including slight productive cough and slight streaking of sputum on several occasions. The patient denied pains, dyspnea, night sweats, loss of weight, frank hemoptysis, or other important symptoms. In March, 1941, he was hospitalized 10 days for "bronchitis."

There were no significant physical findings and the patient's general condition was excellent. His weight was 222 pounds.

Bronchoscopy: The larynx, trachea and the bronchi of the right lung appeared normal. A slight amount of thick tenacious mucus was aspir-

ated from the left main bronchus. The other findings were negative except for slightly congested mucosa.

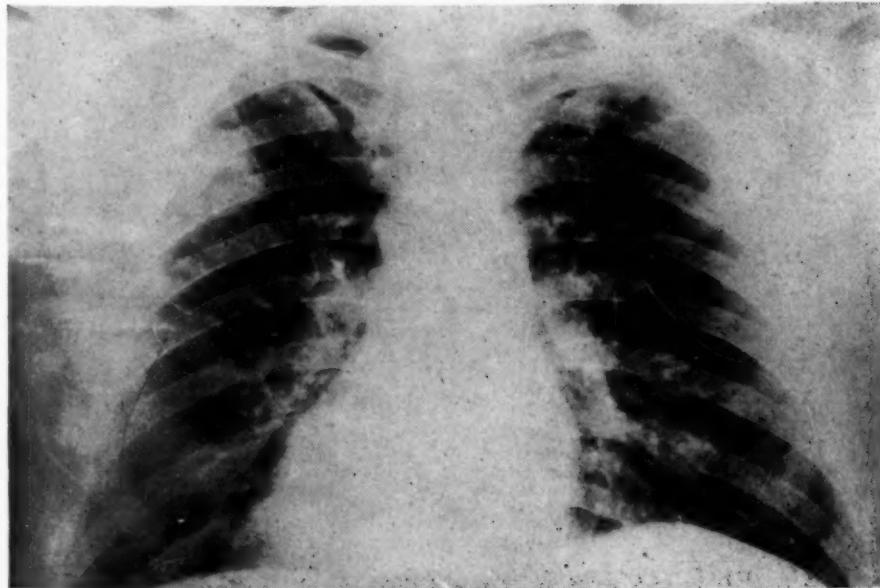
Laboratory and X-ray Findings—Blood counts, urinalyses, serology and sedimentation rate were negative or within normal limits. Tests for tuberculosis, including 30 sputums, 8 gastric washings, and 2 bronchoscopic specimens examined by smear, culture and animal inoculation, were negative. The tuberculin test was positive.

X-ray of chest 4/7/41 revealed a homogenous circumscribed density 4 cms. in diameter in the left second interspace laterally. 10/17/41, the density previously mentioned reduced in size to about 2 cms. in diameter. 10/24/41, bronchography revealed no bronchial pathology or bronchial connection with the mass. 1/16/42, the lesion in the left upper lung decreased slightly. 6/6/43, the lesion, left upper lobe, reduced to 1½ cms. and appears fibrotic.

Progress While Under Observation—Low grade fever was noted for many months during first period of hospitalization but there were no other significant changes in the patient's general condition or the symptomatology referable to the chest.

Diagnosis—Circumscribed, non-neoplastic lesion, presumably a cyst or inflammatory mass within the lung, involving the left upper lobe, chronic, cause and duration undetermined.

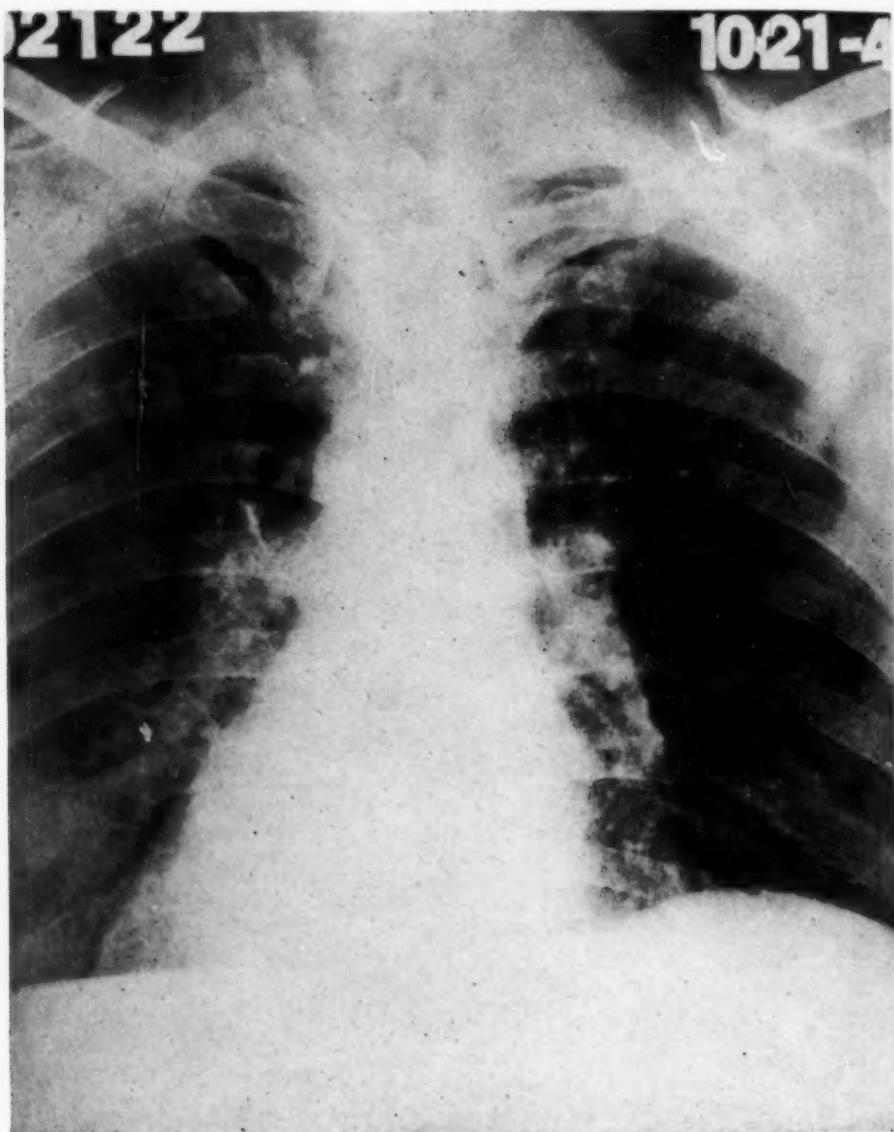
Comments on Case—This patient demonstrated a diagnostic and therapeutic problem. He made a good recovery on a conservative method of treatment but the finding of a circumscribed pulmonary lesion when first seen simulated a neoplastic lesion so closely that operative intervention might well have been justified. Since no pathological diagnosis was possi-



CASE II

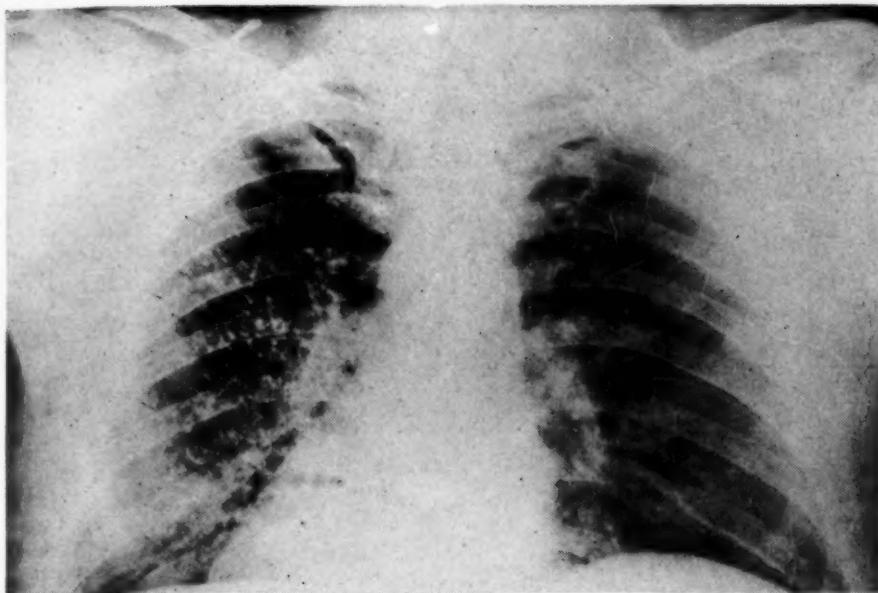
Fig. 1—X-ray 7 April 1941, showing circumscribed density left upper lobe.

ble, it might well have been a safer procedure under ordinary circumstances to explore the patient surgically, remove the pathological lesion locally and to base further treatment on the results of frozen section at time of operation. The danger of tuberculosis or some other inflammatory process for which surgery would not be advisable always confronts the diagnostician; therefore, he must be cautious in making a decision in a case of this kind.



CASE II

Fig. 2—X-ray 21 October 1941, showing decrease in size of the density and cyst-like wall medial aspect.



CASE II

Fig. 3—X-ray 16 January 1942, lesion resolving, considerably reduced in size.
Residuals of lipiodol injection noted.

CASE III

Cystic disease of the lung. Presented to show the tumor-like mass on x-ray of the chest, as compared with the cystic appearance of the lesion when empty.

L. G. C., male, age 21; Register No. 175618.

History and Physical Findings—The patient was in good health until February, 1941, when he developed an upper respiratory infection which gradually subsided. He did not fully recover and in April he noted that he was losing weight and that he became fatigued easily. Sharp pains developed in the right lower chest and he began to cough up foul-smelling sputum which on one occasion was blood streaked. When he was admitted to Walter Reed General Hospital on July 5, 1941, he had lost 32 pounds.

Physical findings revealed an undernourished, chronically ill patient, weighing 109 pounds. The general examination was essentially negative except for the examination of the chest which showed retraction on the right side, impaired mobility of the right hemidiaphragm, impaired resonance, and conduction of breath sounds below the 5th rib level anteriorly.

The bronchoscopic examination revealed nothing of importance other than the congestion and secretion from the branches of the lower lobe bronchus on the right.

Laboratory and X-ray Findings—Blood counts, urinalyses, serology, repeated sputum tests were negative or within normal limits.

X-rays of the chest including fluoroscopy showed multilocular cystic changes in the lower one-third of the right lung with numerous fluid

levels after postural drainage and a more or less homogeneous shadow when filled with secretions. Lipiodol injection revealed a bronchial connection to the cystic area. There was little change on serial study during a period of six months' observation.

Progress While Under Observation—The patient was treated conservatively including the use of postural drainage and symptomatic medication. He produced much foul sputum and on 10/15/41 hemoptysis developed. During the period of October 15 to October 20, he coughed up on the average of one pint of bright red blood daily and ran a moderately toxic course. Lobectomy was refused and artificial pneumoperitoneum was resorted to as an emergency measure. Except for slight streaking no further bleeding occurred after October 20. The diaphragm was elevated at least one interspace by the abdominal air as demonstrated by x-ray and the cystic cavity was reduced to almost one-half of its original size. The patient gradually improved in strength, became afebrile in one month's time, but at the time of his discharge, 12/30/41, he was considered a chronic invalid. It was unofficially reported to the hospital that this patient died suddenly of acute pulmonary hemorrhage within one month after discharge from the hospital.

Diagnosis—Cysts, pulmonary, multiple, lower one-third, right lung, severe, with secondary pyogenic infection, cause undetermined, probably congenital.

Comments on the Case—The exact cause of this patient's symptoms was undetermined but it is felt that congenital cystic disease was more likely than acquired inflammatory cysts that might complicate bronchial pathology such as bronchiectasis. The only definitive treatment possible in a case of this type is lobectomy but the patient did not consent to this operation.

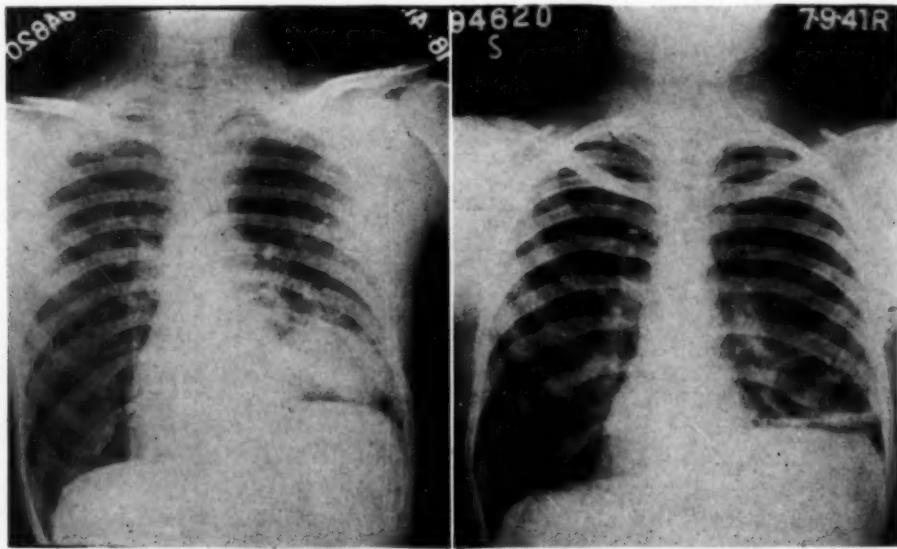


Fig. 1

CASE III

Fig. 2

Fig. 1—X-ray of the chest showing large circumscribed density, right base.
 Fig. 2—X-ray of the chest after postural drainage of cystic cavity.

CASE IV

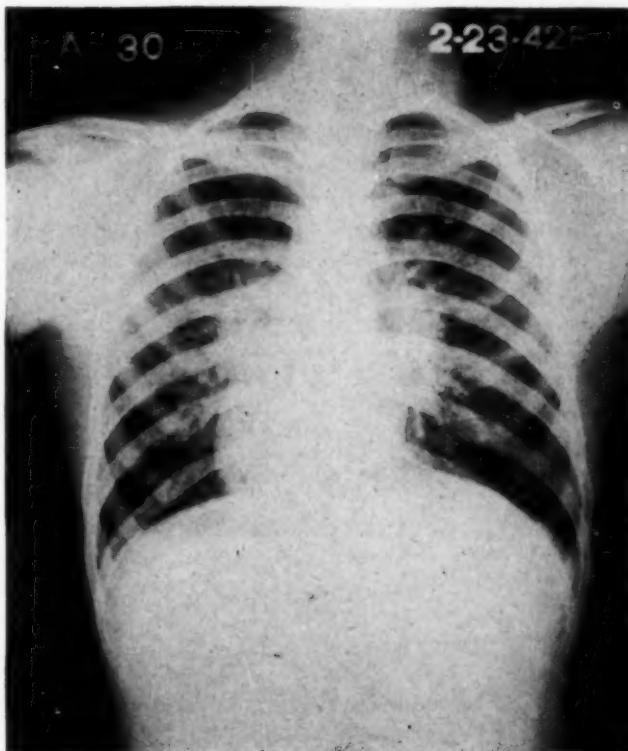
Hilar and mediastinal lymph gland enlargement due to sarcoidosis. Considered in differential diagnosis of lymphoblastoma.

W. I., colored male, age 17; Register No. 179222.

History and Physical Findings—Patient admitted to hospital 2/7/42 with a transfer diagnosis of tuberculous dactylitis of both hands. Two years prior to admission patient developed an ulcerated area on the thumb of the left hand which gradually grew worse. In 1941 he noticed generalized swelling of the shafts of the fingers of both hands. At the time of admission to the hospital he was complaining of pain in his hands which he stated had been present about 5 months. He did not complain of symptoms referable to the chest or other systems.

The physical examination revealed a fairly well developed and nourished male, weighing 120 pounds without evidence of toxemia. The hand showed diffuse enlargement of the shafts of the fingers, associated with some swelling of the dorsum of the hands. The chest findings were essentially negative.

Laboratory and X-ray Findings—Sedimentation rate 12 millimeters. Serology negative, tuberculin test repeatedly negative, urinalyses, blood count, blood chemistry and electrocardiogram were negative or within



CASE IV

Fig. 1—X-ray of the chest revealing enlarged hilar and mediastinal glands and hilar pulmonary shadows.

normal limits. Smear and culture from tissue of amputated finger 6/23/42 negative for acid fast bacilli. Culture and guinea pig inoculation from lymph gland (left epitrochlear) removed 2/18/41 negative for tuberculosis.

X-ray of both hands showed widespread lesions of both phalanges and metacarpals characterized by expansion of the shaft and polycystic configurations. The cortex was broken in some locations. The distal ends of bones, forearms and legs showed cystic changes. The x-ray of the chest revealed prominent hilar shadows with infiltrating strands of density extending well into the lung fields. Serial study of the chest over a period of six months showed no change.

Pathological report of lymph gland: "Gross: Half a lymph node, 9 mm. in diameter. Soft and fleshy with slight trabeculation and some recent hemorrhage. The capsule is intact. Microscopic: Hyperplastic node with capsule intact. Approximately 20 per cent of the substance is formed by tubercle-like masses of expanding epithelioid masses with some central degeneration but no caseation. The larger of these contain occasional foreign body giant cells. The surrounding lymphatic tissue is compressed and appears to contain foci of early epithelioid change. There are many macrophage forms in the pulp, occasional eosinophiles. The pulp, in some areas, appears to show early fibrosis. There is no active suppuration but generally increased vascularity. The hilar fat contains a few reacting lymphocytes. Using an acid-fast stain, fine red granules, 100 to 500 millimicra in diameter, are seen in pulp macrophages, endothelium and fibrous tissue of the capsule. This picture fits a hyperplastic tuberculosis as well as any other morphological entity but in particular fits the classical description of Boeck's sarcoid. Diagnosis: Boeck's sarcoid of lymph node."



CASE IV

Fig. 2—Cystic changes in phalanges and metatarsal bones, both feet.

Progress While Under Observation—During the six months' period of observation, the patient's condition remained practically the same. There was some fluctuation in weight but he remained nontoxic and had few complaints other than slight pain, both hands and feet. The ulcerative process of the 5th finger required amputation and this was done 6/23/42. Otherwise, treatment given was symptomatic.

Diagnosis—Boeck's sarcoidosis, involving lungs, moderate; bones of hands and feet, severe; bones of lower forearms and legs, mild; cause undetermined.

Comments on Case—This case is presented to demonstrate lymphatic enlargement of hilar and mediastinal nodes that must be differentiated from various types of lymphoblastoma. The cystic changes in the hands and feet and the negative tuberculin were helpful in forming the diagnosis in this case. In cases showing more circumscribed enlargement of hilar nodes, presenting no cystic changes of the bones, and having no glands for biopsy, the diagnosis is not so easily made.

CASE V

Atelectasis of the right lower lobe with associated bronchiectasis, simulating bronchial obstruction by tumor, treated by lobectomy. Proven to be tuberculous after operation.

R. W. S., male, age 20; Register No. 174265.

History and Physical Findings—This patient was treated from 11/11/40 until his admission to Walter Reed General Hospital 5/8/41 for bronchiectasis and atelectasis, right lung. He stated he had been in good health until 11/9/40 at which time he developed symptoms of acute respiratory infection. Since that time he had had a chronic productive cough, his weight dropped 18 pounds, and moderate toxemia had been present. He coughed up considerable foul mucus, especially on arising.

Weight 132 pounds. Blood pressure 110/65. The findings over the lower right chest were those of atelectasis, that is, impaired expansion, dulness, decreased breath and voice sounds, but there were definite moist rales present. The left lung was normal.

Laboratory and X-ray Findings—The sputum was negative for tuberculosis or fungi but the stomach washing of November 3 showed culture positive for acid-fast bacilli after six weeks of incubation. That tuberculosis was present was demonstrated on pathological section of lung removed at operation. Urine, blood count, serology were negative or within normal limits. Occasional leukocytosis was noted. Sedimentation index 26 mm. 12/21/41.

X-ray of the chest: The right lower lobe was atelectatic and the lower half of the right lung field contained numerous soft, mottled densities. In the right infraclavicular area slight parenchymal infiltrations were present. In the left lung multiple calcified lesions were present. After lipiodol, moderate to marked saccular bronchiectasis was noted in the lower lobe, right lung.

Progress While Under Observation—The patient was treated on a rest regime and bronchoscopic aspirations without improvement. Lobectomy was then performed because of the atelectasis and bronchiectasis. He made an uneventful recovery and there was improvement both in local

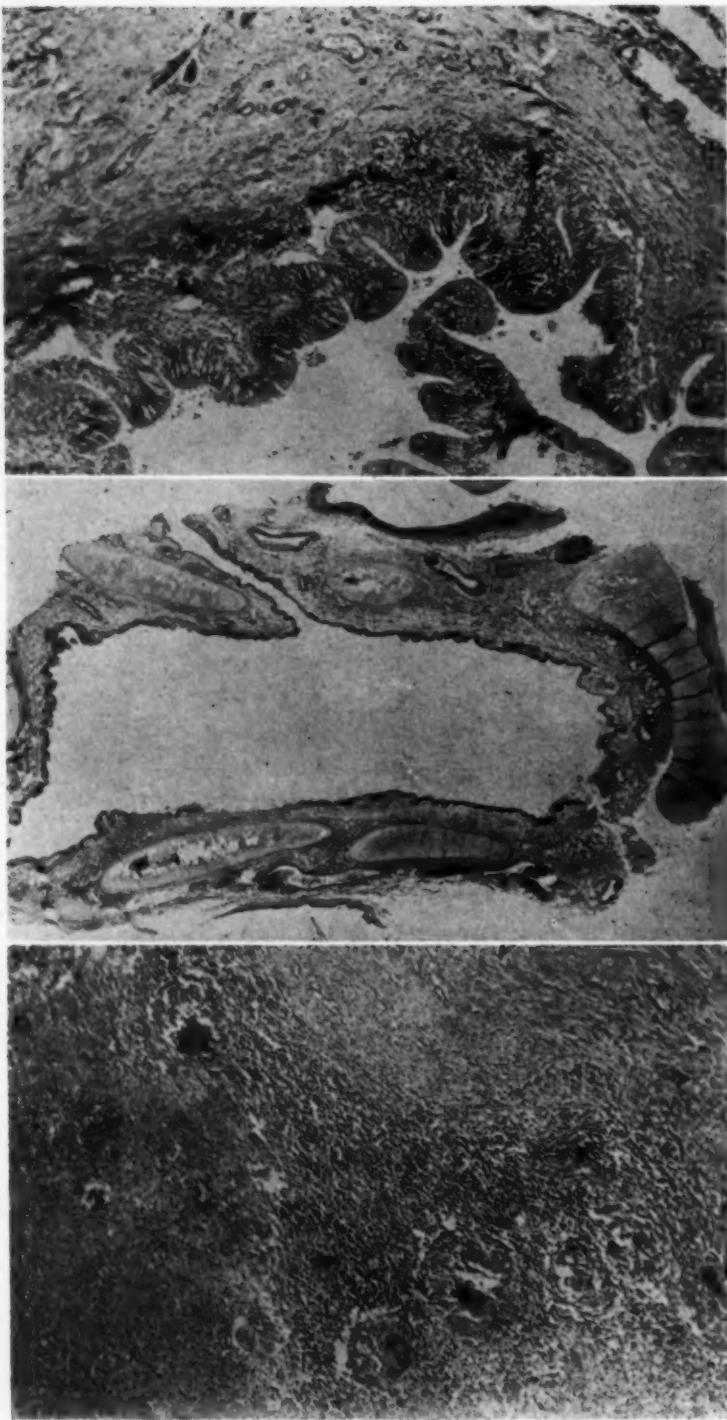


Fig. 2

Fig. 3

Fig. 4

CASE V

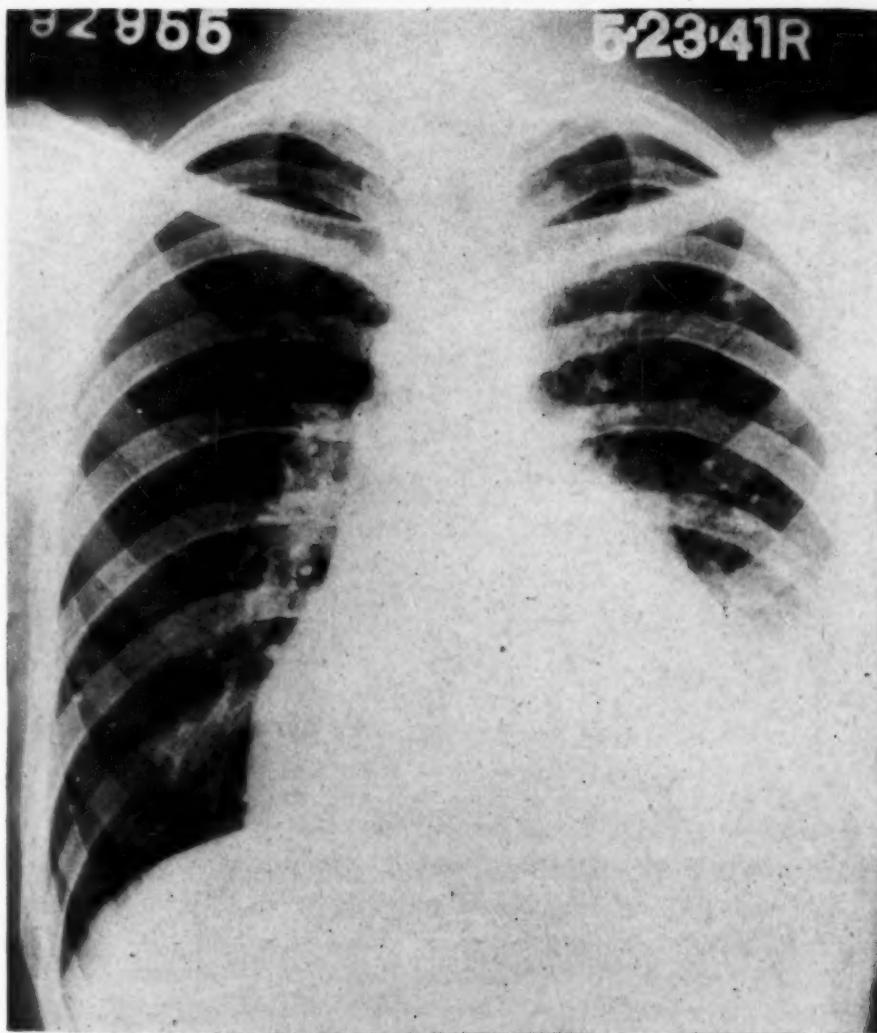
Fig. 2—Microscopic section from right lower lobe establishing tuberculous etiology. Figs. 3 and 4—Sections from bronchi, right lower lobe, showing chronic bronchiectasis.

symptoms and toxic manifestations. He gained about 10 pounds in weight and the general trend was favorable.

Diagnoses—(1) Tuberculosis, pulmonary, chronic, active all lobes, right lung, moderately advanced "C." (2) Atelectasis, chronic, lower lobe right, secondary to No. 1. (3) Bronchiectasis, chronic, saccular, lower lobe right, secondary to No. 1.

Operation, 8/15/41: Lobectomy, right lower lobe and portion of right upper lobe.

Comments on the Case—This case demonstrated marked atelectasis of one lobe, the cause of which was not determined until lobectomy. This type of process along with suppuration so often attends the blocking of a bronchus from a new growth that this possibility was strongly considered preoperatively.



CASE V

Fig. 1—Atelectasis, right lower lobe.

CASE VI

Elevation of the left diaphragm by tumor mass. Demonstrating use of diagnostic pneumoperitoneum in proving the lesion subdiaphragmatic.

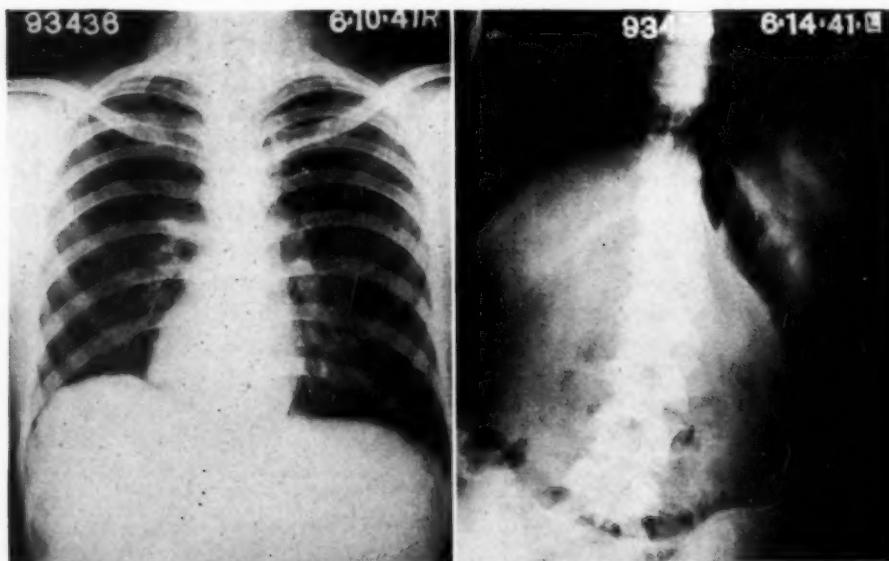
J. T. S., white male, age 22; Register No. 174656.

History and Physical Findings—Patient was admitted 5/24/41 with a diagnosis of low grade persistent fever of undetermined cause with associated persistent pain in the region of the left diaphragm. He had a thorough medical survey at another institution including many laboratory and x-ray examinations but these studies were negative. Pains in the left upper abdomen and lower chest persisted and the patient gradually lost weight.

Physical examination on admission showed a rather malnourished male weighing 123 pounds (normal weight 154 pounds). Chest examination showed the left diaphragm higher than normal and excursion poor. No masses felt in the abdomen. Definite tenderness in left abdomen and in splenic area.

Proctoscopic examinations 6/25/41 and 11/8/41 revealed no significant findings. Proctoscopic 5/30/42 revealed a mass several centimeters in diameter, 5" from the anal orifice. The mass was hard and immovable and the mucosa was not broken over it. A biopsy was taken.

Laboratory and X-ray Findings—Blood counts, urinalyses, serology, blood chemistry, agglutination tests for various infectious fevers, examination of pleural fluid, sputum tests, gastric washings for acid-fast bacilli, tuberculin tests, basal metabolic rate and electrocardiogram were negative or of no diagnostic importance. Sedimentation index 17 to 34 millimeters in one hour.



Left

Fig. 1

CASE VI

Fig. 2

Left

Fig. 1—X-ray of chest showing elevation of left diaphragm. *Fig. 2*—Diagnostic pneumoperitoneum revealing abnormal densities and obliteration of free subphrenic space on the left.

X-ray and fluoroscopic examination of the chest revealed the left diaphragm slightly higher than the right and less mobile than normal. Diagnostic pneumoperitoneum 6/13/41 did not reveal air under the left diaphragm as should be expected and definite "matting of the tissue" and increased soft tissue densities were noted. The findings were suggestive of malignancy involving the viscera of the left upper quadrant but abdominal Hodgkin's disease and tuberculosis were considered as other possibilities. Gastro-intestinal series and barium enema revealed no gastroenterocolonic pathology. X-ray of the kidneys 6/28/42 revealed the left kidney displaced downward and medially by a mass which was probably retroperitoneal.

The biopsy from rectal tumor 6/25/42 revealed findings of a metastatic carcinoma. The microscopic picture resembled closely that of a primary carcinoma of the renal cortex. Exploratory laparotomy 7/15/42 revealed a tumor in the region of the left kidney with metastasis to liver and pelvic glands. Microscopic study revealed findings of carcinoma believed to be from the adrenal gland.

Progress While Under Observation—The patient was observed practically 1½ years. A definite diagnosis was not made until June of 1942, although the diagnostic pneumoperitoneum several weeks after admission was very suggestive of malignancy involving the viscera, left upper quadrant. On 7/22/41, the left subphrenic area was investigated and an abscess drained. The cause for the abscess was not determined at time of operation and no specific organisms were found. Other than deep x-ray therapy from 8/4/42 to 9/11/42 of 6000 "r" all treatment was essentially symptomatic.

Diagnosis—Adenocarcinoma, left suprarenal gland, left kidney, and paraspinal area.

Comments on Case—This case represented a diagnostic problem. The cause for the obscure fever was found after extensive study but in retrospect it is evident that the diagnostic pneumoperitoneum suggestive of pathology, left upper quadrant, should have been considered an indication for an exploratory laparotomy. The case clearly demonstrates the value of diagnostic pneumoperitoneum in the differentiation of subdiaphragmatic from supradiaphragmatic lesions.

CASE VII

Bronchogenic cyst of the anterior mediastinum, treated successfully by surgery.

W. B. W., male, age 27; Register No. 187888.

History and Physical Findings—On routine x-ray examination in October, 1942, a large well circumscribed density was noted in the left superior mediastinum and he was hospitalized 10/6/43 for clinical study and treatment. He was absolutely symptom free and stated he was able to undergo all types of physical exercises without discomfort. There was no loss of weight.

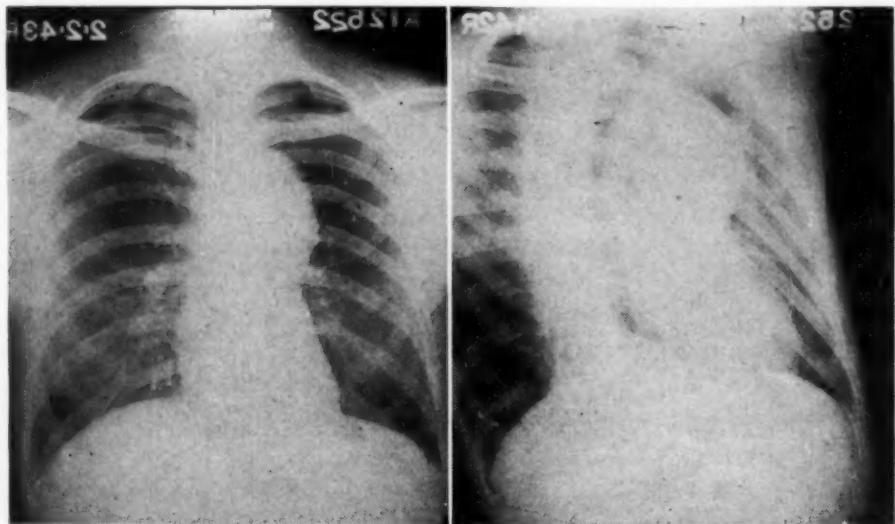
The physical examination was essentially negative except for impaired resonance to the left of the sternum in the 2nd and 3rd interspaces extending laterally about 5 cms. Blood pressure was normal and equal each arm.

Laboratory and X-ray Findings—Blood counts, urinalyses, serology, blood chemistry, were negative or within normal limits.

The x-ray of the chest revealed a sharply defined oval mass extending from the sternal end of the left clavicle along the anterior and left side of the mediastinum downward to slightly below the pulmonary conus. The mass displaced the trachea to the right and backward. The aorta was distinctly seen through the mass and appeared normal. The mass did not pulsate or ascend with swallowing. Serial x-ray study revealed no change over a period of 4 months.

Pathological report: “*Gross*—Mass, 10x7x6 cm., weighing 200 grams. The external surface is somewhat ragged with numerous fibrous strands. The cyst is intact and is roughly ovoid. The cut surface shows numerous cysts measuring from a few mm. up to 4 cm. in diameter. In one portion there is a large cystic structure while most of the cut surface is more or less solid with numerous cysts throughout. These cysts are filled with thick rather clear mucoid material. In one superficial portion beneath the capsule there is a 2x2.5 cm. portion of cartilage. There is no evidence of bone. Separately present is a 20 cm. segment of rib showing nothing of gross significance. *Microscopic*: Sections show predominance of dense fibrous tissue which in areas show cartilaginous transformation. Scattered throughout there are bundles of smooth muscle fibers both longitudinal and transverse. There are numerous glandular structures lined with low cuboidal to columnar epithelium which are well differentiated and mucous in type. In areas there are definite cilia protruding into the lumen. There is no evidence of malignancy. *Diagnosis*: Bronchogenic cyst.”

Progress While Under Observation—On 2/4/43 the tumor was removed by Major Brian Blades, M.C., Thoracic Surgeon, Walter Reed General Hospital. The tumor was found to be located in the anterior mediastinum beneath the mediastinal pleura and was situated at the base of the heart



Left

Fig. 1

CASE VII

Fig. 2

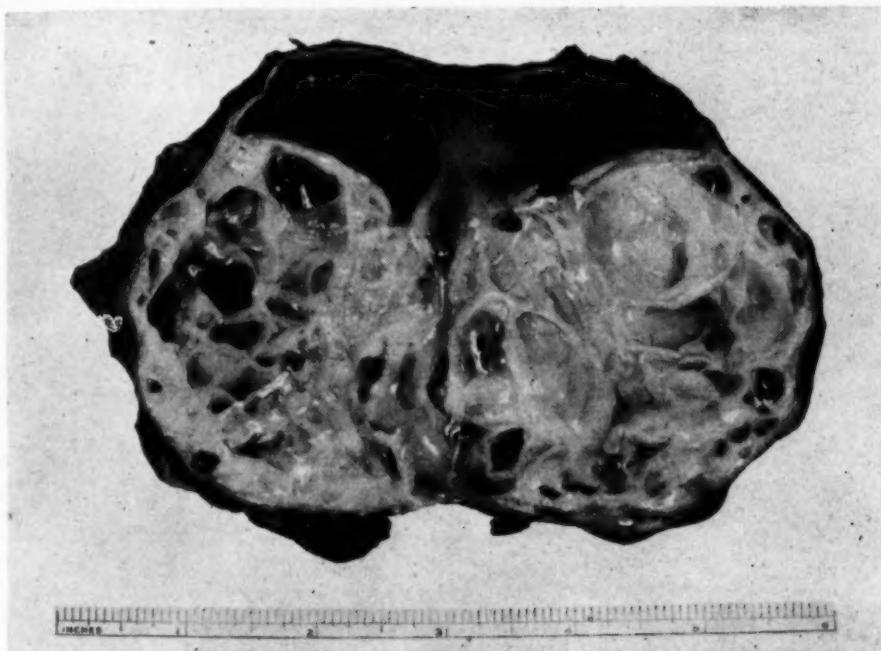
Left

Fig. 1—Bronchogenic cyst, left anterior mediastinum. *Fig. 2*—Oblique view demonstrating anterior position of the tumor.

extending upward as far as the arch of the aorta. His postoperative course was uneventful and he was returned to duty 4/8/43.

Diagnosis—Cyst, bronchogenic, anterior mediastinum, cause undetermined.

Comments on Case—The preoperative diagnosis was dermoid or bronchogenic cyst although aneurism was given consideration in the differential study. Because of the size and unilateral location of the tumor a therapeutic test with deep x-ray was considered unnecessary prior to exploratory operation.



CASE VII

Fig. 3—Bronchogenic cyst removed at operation.

CASE VIII

Neurofibroma involving the vagus and sympathetic nerves; treated successfully by surgical removal.

Note: This case was previously published, *J. A. M. A.*, 123: 409, (Oct. 16) 1943, "Resection of the Left Vagus Nerve for Multiple Intrathoracic Neurofibromas," Maj. Brian Blades, M.C., and Lt. David J. Dugan, M.C.

W. E. P., white male, age 35; Register No. 198495.

History and Physical Findings—On 10/13/41 during a routine physical examination a mediastinal mass was found on x-ray of the chest. The patient was observed elsewhere and was transferred and admitted to Walter Reed General Hospital 4/1/42 for x-ray therapy. The transfer diagnosis was: Lymphadenoma, mediastinal, type and cause undetermined. Six weeks prior to admission the patient noted a sensation of

obstruction to breathing and dyspnea on exertion. He developed a cough with slight productivity but noted no hemoptysis. He also experienced a dull burning sensation substernally accentuated particularly when he would lie on his left side. He denied gastrointestinal symptoms although he stated his appetite had decreased within the past year resulting in a loss of about 17 pounds.

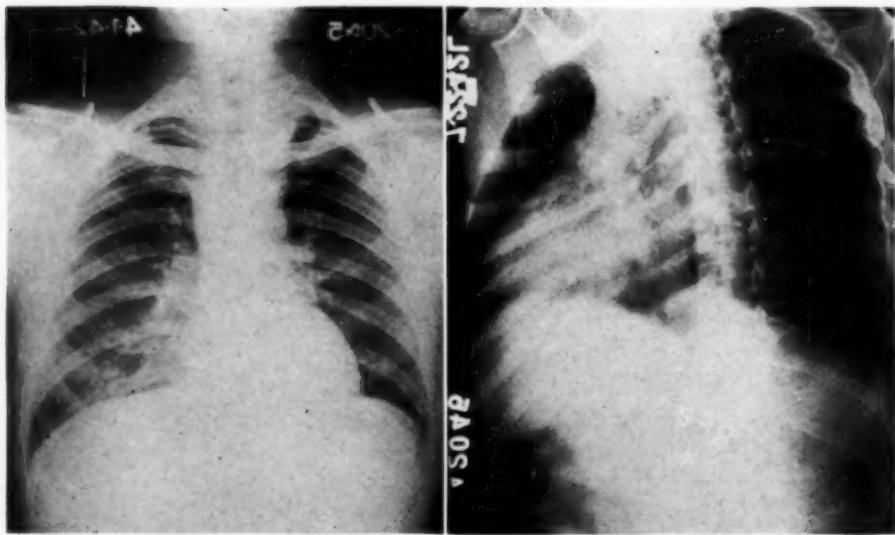
The physical findings of the chest revealed no information of diagnostic importance. Patient's general condition was good. He weighed 157 pounds.

Bronchoscopy 4/29/42 revealed no definite pathology.

Laboratory and X-ray Findings—Numerous laboratory studies, including blood counts, urinalyses, serology, sputum tests, sedimentation rates and electrocardiogram were negative or within normal limits.

Biopsy of inguinal lymph gland performed 2/2/42 was diagnosed as a fibroma. The size of the gland removed was 4x2x1 cm.

Pathological report of tumor removed 8/5/42: "Gross—Vagus nerve, 14 cm. long, 20 grams. At one end 5.5 cm. length is a fusiform swelling to 1.5 cm. diameter. At the other end for 7 cm. is a similar swelling, 2 cm. in diameter. These two swellings are connected by a central constriction 1 cm. long and 8 mm. in diameter. There is a delicate fibrous capsule. The tissue is slightly translucent, slimy and delicately fibrous without particular degeneration. There are two separate round fragments, 2 and 3 cm. in diameter, weighing 7 and 13 grams respectively. They are partially covered by a delicate fibrous capsule and consist of translucent homogeneous soft fibrous material similar to the vagus. Microscopic: Sections of both vagus and other fragments are essentially similar. The tissue is homogeneous, consists of an apparently edematous delicate fibrous substance with distinct, nonstaining, cloudy intercellular substance. It con-



Left

Fig. 1

CASE VIII

Fig. 2

Left

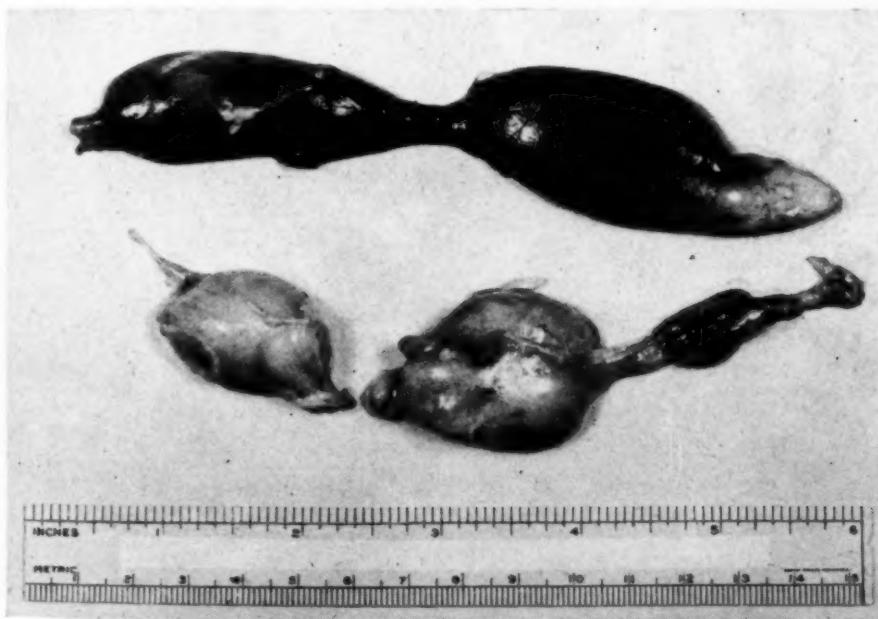
Fig. 1—Neurofibroma, left mediastinum. Fig. 2—Oblique view, demonstrating posterior position of the tumor.

tains many fibroblastic cells, sometimes slightly hooked or irregular in nuclear outline. The vagal fragment contains nerve elements which are separated by this tissue. There are no mitoses but the fibrous cells are generally rather dark staining. There is palisading but the cells appear to clump slightly. There is no degeneration. Diagnosis: Neurofibromatosis from vagus nerve and posterior mediastinum."

Progress While Under Observation—The patient was given 32 x-ray treatments of 8400 "r" (air) from 4/5/42 to 6/13/42 without any change or shrinkage of the tumor. The tumor was removed surgically 8/5/42 after resection of the 5th rib, by Maj. Brian Blades, Thoracic Surgeon, Walter Reed General Hospital. One mass was found beneath the parietal pleura in the posterior superior sulcus originating from the sympathetic nerve trunk. Two tumor masses involving the left vagus nerve were found on opening the mediastinal pleura and were removed. No evident change in respiration, blood pressure or pulse were noted at the removal of the tumors or nerve. The patient developed a Horner's syndrome and temporary paralysis of the left vocal cord after the operation but this disappeared in about four months. The patient returned to duty in good condition 11/17/42.

Diagnoses—(1) Neurofibroma, posterior mediastinum, arising from left vagus nerve. (2) Neurofibroma, posterior mediastinum, arising from left inferior sympathetic chain.

Comments on Case—This case represented a diagnostic and therapeutic problem that was concluded successfully. The preoperative diagnosis was neurofibroma although tuberculosis and lymphoblastoma were considered.



CASE VIII

Fig. 3—Gross appearance of the tumors after surgical removal. The neurofibroma of the vagus nerve was the larger of the two tumors.

CASE IX

Large solid tuberculous glands, posterior mediastinum, with findings suggestive of neurofibroma. Pressure symptoms necessitated removal.

D. G. R., white male, age 56; Register No. 199215.

History and Physical Findings—About March, 1942, the patient first noted slight dyspnea on exertion. One year later he developed an aching sensation in the region of the 5th intercostal space on the right side, and sought medical attention. Because of the x-ray findings he was sent to Walter Reed General Hospital. On admission he complained of a mild cough with production of a small amount of grayish phlegm each morning, slight dyspnea on exertion and fatigability.

The general physical examination was essentially negative. The thorax was slightly emphysematous in contour.

Laboratory and X-ray Findings—Blood counts, urinalyses, serology and sputums were negative or within normal limits.

The x-ray of the chest 3/15/43 showed a mass in the posterior mediastinum on the right side. On 7/7/43 a recheck showed no increase in the size of the tumor.

Pathological report of glands removed at operation: "Gross: Specimen consists of two separate masses, the larger weighing 120 grams. The larger mass is generally symmetrically ovoid and completely encapsulated except for one 2x4 cm. area which is somewhat roughened. There are a few fairly dense fibrous strands attached to the capsule. The smaller mass measures 2x3 cm. and generally is not encapsulated, the surface being rough. In addition there are two small 1.5x2 cm. lymph nodes attached to the larger specimen. The cut surface of the large specimen reveals two large lymph

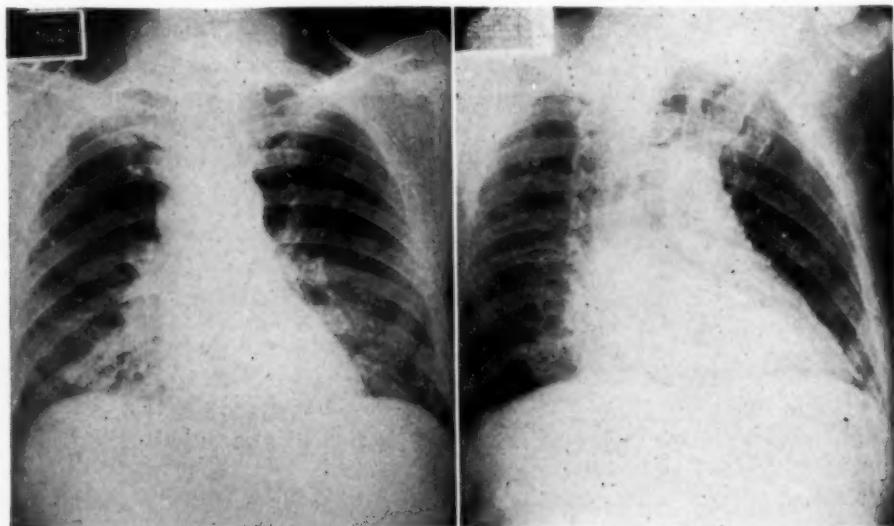


Fig. 1

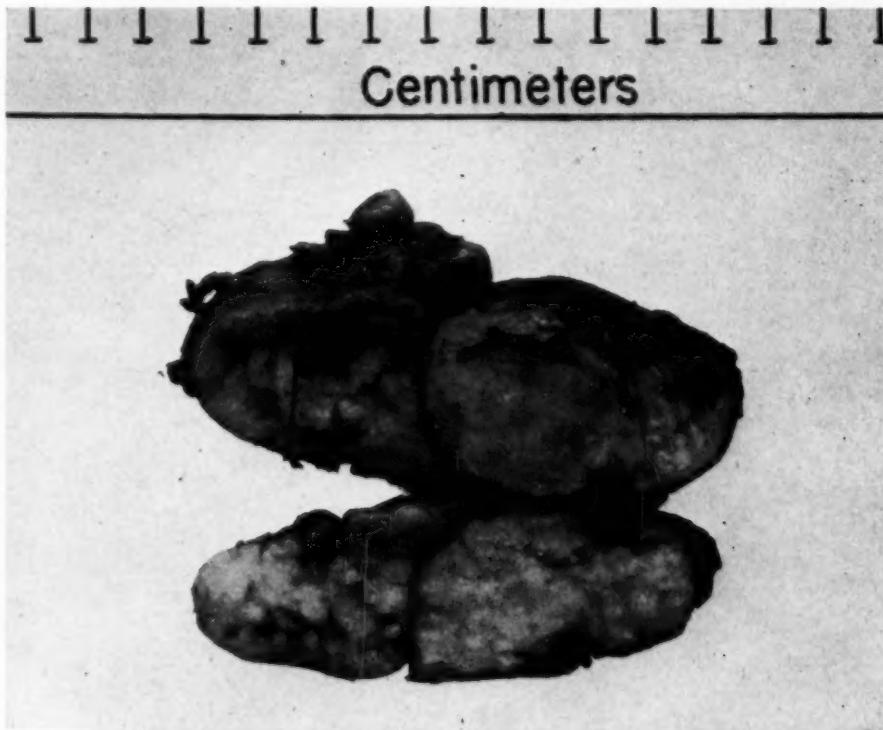
CASE IX

Fig. 2

Fig. 1—Anterior posterior view of little diagnostic aid. *Fig. 2*—Oblique view revealing large oval density, right posterior mediastinum. Demonstrating importance of oblique view in addition to the usual anterior posterior projection.

nodes adherent to each other by rather dense fibrosis. The surface everywhere is grayish-white with anthracotic streaking in areas. There are no areas of gross necrosis or caseation. There appears to be considerable cellularity. *Microscopic*: Sections reveal lymph node throughout which there is considerable lymphocytic hyperplasia with almost complete loss of normal follicular arrangement. Throughout are large discrete and conglomerate epithelioid tubercles, some showing early central caseation. In some of the tubercles this central caseous area is surrounded by radially arranged elongated cells. Many typical large giant cells are present throughout these tubercles, both in the central caseous areas and the periphery. Some of these tubercles are surrounded by distinct separate zones of lymphocytes and plasma cells. In one section there is a focal zone of eosinophilia associated with an epithelioid reaction and many large multinucleated bizarre cells, the latter closely resembling those seen in Hodgkin's disease. Special staining reveals a rare acid-fast organism, morphologically resembling tubercle bacillus."

Progress While Under Observation—An exploratory operation was considered the procedure of choice since the lesion was presumed to be a benign mediastinal tumor, probably of nerve origin. On 8/3/43 the patient was operated upon by Maj. Brian Blades. An incision was made in right posterior chest from level of 5th thoracic vertebra following curve of scapula and ending at midaxillary line and the lymphatic tumors removed. He made an uneventful recovery and was returned to duty.



CASE IX

Fig. 3—Tuberculous gland removed at operation.

Diagnosis—Lymphadenitis, chronic, tuberculous, posterior mediastinum, right.

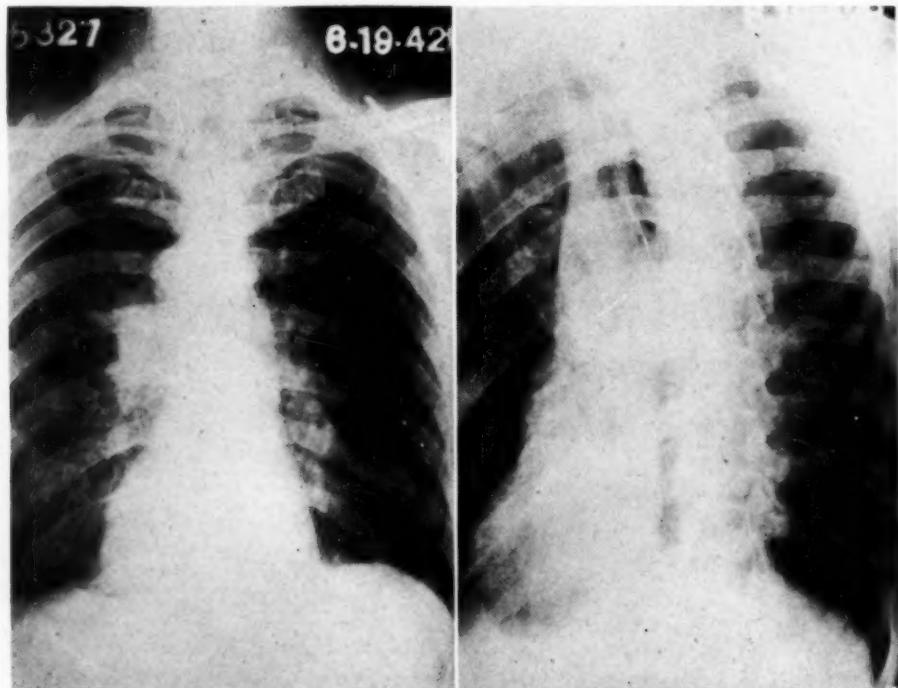
Comments on Case—Because of the location of this tumor it was considered a primary neuroma prior to operation. It showed no growth on serial x-ray study over a period of four months and there were no diagnostic criteria to permit a definite opinion.

CASE X

Squamous cell bronchial carcinoma, main bronchus, left lower lobe. Demonstrating slow clinical course and successful treatment by surgery.

F. L. S., white male, age 51; Register No. VA-38455.

History and Physical Findings—Father died, age 81, of cancer of the throat. For four consecutive years the patient suffered frequently from what he thought were intermittent attacks of pneumonia. Since 1937 he had become progressively weaker and had been unable to carry on his occupation. He had had a persistent cough for several years with blood tinged sputum on one occasion. In April, 1942, he first noted generalized muscular aching with chilly sensations associated with drenching night sweats and severe coughing spells. He was checked by his doctor but no specific disease was found. After progression of the symptoms he was finally hospitalized 6/17/42.



CASE X

Fig. 1—Carcinoma, main bronchus, left lower lobe. *Fig. 2*—Oblique view of little diagnostic aid.

Physical examination: The general condition was good, weight 162 pounds, height 74½ inches. Admission temperature 99, pulse 100. The respiratory excursions were equal, unlimited and normal except for prolongation of inspiratory phase of respiration with an associated sound that simulated passage of air through an obstructed airway. Many extraneous crowing sounds were heard on auscultation of the lung. Chest otherwise negative on examination. No lymphadenopathy.

Bronchoscopy, 7/15/42, revealed a suspicious granular area and decrease in the size of the lumen, left main bronchus, ½ inch below left upper lobe opening. The entire picture was suggestive of malignancy. A biopsy was taken.

Laboratory and X-ray Findings—Electrocardiogram showed AV heart block, 1st degree. Sputum examination, blood chemistry, serology, hemograms, urinalyses, were negative or within normal limits. Sedimentation index ranged from 18 to 25 millimeters in one hour.

The x-ray of the chest showed infiltrative densities extending postero-laterally from large irregular left hilar density; right lung negative; mediastinal and diaphragmatic dynamics normal; heart normal; aorta moderately sclerotic. Lipiodol injection 7/8/42 showed lipiodol entered upper lobe bronchus freely; no abnormality; only small amount of lipiodol entered the left lower bronchus; irregular narrowing of a 2 to 3 centimeter segment of left lower lobe main bronchus about 6 centimeters distal to bifurcation strongly suggestive of endobronchial neoplasm.

Pathological report of left lung: "Gross: Left lung, 450 grams. The pleural surface is normal. There are no unusual hilar nodes. One, 3 mm.



Fig. 3



CASE X

Fig. 4

Figs. 3 and 4—Appearance of the bronchial lesion as seen after pneumonectomy.

in diameter, is soft and anthracotic. There is a long left common bronchus stump. On dissection of the bronchial tree the bifurcation of the main bronchus is involved by tumor, most particularly in the main branch of the lower lobe. The tumor extends up the main bronchus of the left lung somewhat but the line of amputation is over 1 cm. above the endobronchial roughening anteriorly and 2 cm. above posteriorly. The tumor is characterized by very slight elevation and considerable roughening of the endobronchial mucosa with spread outward, especially posteriorly and laterally. The cartilage can be identified. There is no fungation. The tumor is somewhat scirrhouous, yellowish-white, firm on section and of a somewhat hard sebaceous consistency on palpation. Small nodules in the bronchial mucosa are like dried cheese on palpation. The infiltrating mass extends down the lower lobe bronchus for 4 cm. into the main posterior branch for 2 cm. and up the central superior bronchus for about 5 mm. There is slight bronchiectasis, tubular in form, of the upper lobe, and moderate to moderately severe similar alteration in the lower lobe. No evidence of pneumonia or atelectasis. *Microscopic:* Transection of the proximal end of the lower lobe bronchus shows tumor extending from the surface well beyond the cartilage. This tumor is formed of narrow long strands of transitional epithelium in a loose proliferating fibrous tissue stroma. The epithelium is sometimes metaplastic and in other areas approaches a squamous or pavement form. There is little keratogenesis, no pearl formation, little inflammation. There are areas of eosinophilic necrosis and degeneration in the tumor cords. *Diagnosis:* Carcinoma, squamous, main bronchus, left lower lobe."

Progress While Under Observation—The patient was operated upon 7/25/42 by Maj. Brian Blades, M.C., and a left pneumonectomy performed. His convalescence from the operation was uneventful. One year after the operation his health remained good.

Diagnosis—Carcinoma, squamous, main bronchus, left lower lobe.

Comments on Case—This case presented a fairly typical history of a squamous bronchial carcinoma. It further supports the contention that squamous cell carcinoma of the major bronchi are relatively slow growing and more amenable to surgery than the two other clinical types of carcinoma, namely the round cell and the adenocarcinoma. It also demonstrates a common error of considering the inflammatory secondary symptoms for a considerable period before investigating the possibility of a neoplasm.

CASE XI

Undifferentiated cell type of bronchial carcinoma, main bronchus, right upper lobe. Demonstrating rapid fatal clinical course and similarity to pneumonia.

E. F. J., male, age 50; Register No. 173139.

History and Physical Findings—The patient was admitted to the hospital 3/18/41 with a diagnosis of pneumonia. The symptoms started somewhat insidiously one month prior to admission but when first seen he was a litter case and seriously ill. He showed moderate fever, a moderately productive cough, weakness, and complained of some pain, right upper chest.

Physically the patient did not have the toxemia and the appearance of

a primary pneumonia. His temperature was only moderately elevated but his pulse and respiration were rapid. The examination of the chest revealed impaired resonance and moist rales over the right upper lobe.

Laboratory and X-ray Findings—The blood count revealed a slight leukocytosis and secondary anemia, the urine showed casts and albumin, the blood chemistry showed moderate elevation of blood urea, serology was negative and the sputum was negative for pneumococci and tubercle bacilli.

The x-ray of the chest revealed a widening of the mediastinal shadows and mottled densities, right upper lobe which gradually increased in size and density. The x-ray films taken on a routine physical examination more than two months previously were obtained for serial study and revealed the increase of mediastinal shadows to the right but the lungs were clear.

Progress While Under Observation—The patient was treated three days with sulfathiazole for a possible pneumonic infection without benefit before a clinical diagnosis of a bronchogenic malignancy, right upper lobe, was made. His condition did not permit bronchoscopic examination or operative procedures and his course was rapidly downhill, terminating in his death 4/4/41.

Diagnoses—(1) Carcinoma, undifferentiated, bronchogenic, right lung, upper lobe, with metastasis to liver, left adrenal, mediastinal and cervical nodes. (2) Congestion and edema, severe, both lungs, all lobes. (3) Uremia, severe, terminal.

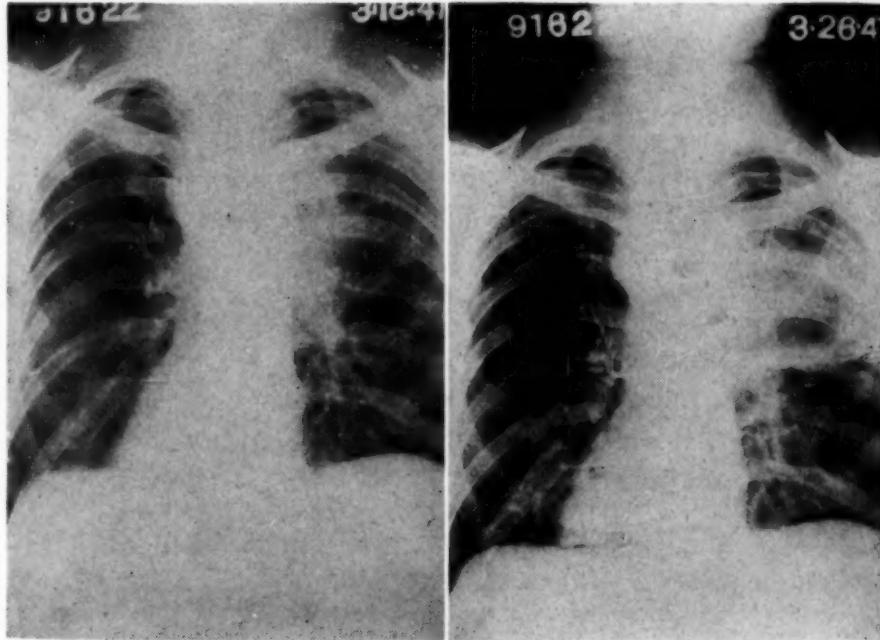


Fig. 1

CASE XI

Fig. 2

Fig. 1—X-ray of the chest 18 March 1941, demonstrating secondary findings (pneumonia and atelectasis), upper lobe, right. Fig. 2—26 March 1941, nine days before death.

Comments on the Case—This case illustrated suppuration in an atelectatic area of the lung behind a blocked bronchus due to a primary bronchogenic cancer of the lung. The symptomatology closely simulated atypical low grade pneumonia and we are reminded to be on the lookout for lung tumors in a case of this kind. In retrospect, it seems likely that at the time of the original x-ray examination a bronchoscopic examination would have permitted a definite diagnosis and presented an opportunity for surgical exploration.

The autopsy findings corroborated the clinical diagnosis and were typical of a primary bronchial neoplasm in the main bronchus, upper lobe, right. The microscopic picture showing undifferentiated cells indicated why the clinical course of this patient was so rapidly downhill.

CASE XII

Bronchial carcinoma, main bronchus, left upper lobe, with marked secondary cavity formation, due to bronchial occlusion, mistaken for pulmonary abscess. Diagnosis made by cervical lymph gland biopsy.

J. B. W., Negro male, age 46; Register No. VA-38140.

History and Physical Findings—The patient's symptoms began in July, 1941, at which time he developed a cough, expectoration of profuse thick yellow sputum, anorexia, malaise, shortness of breath, dull pain in left chest and weight loss. He was treated by a private physician who x-rayed his chest when his symptoms did not respond to the usual types of medi-

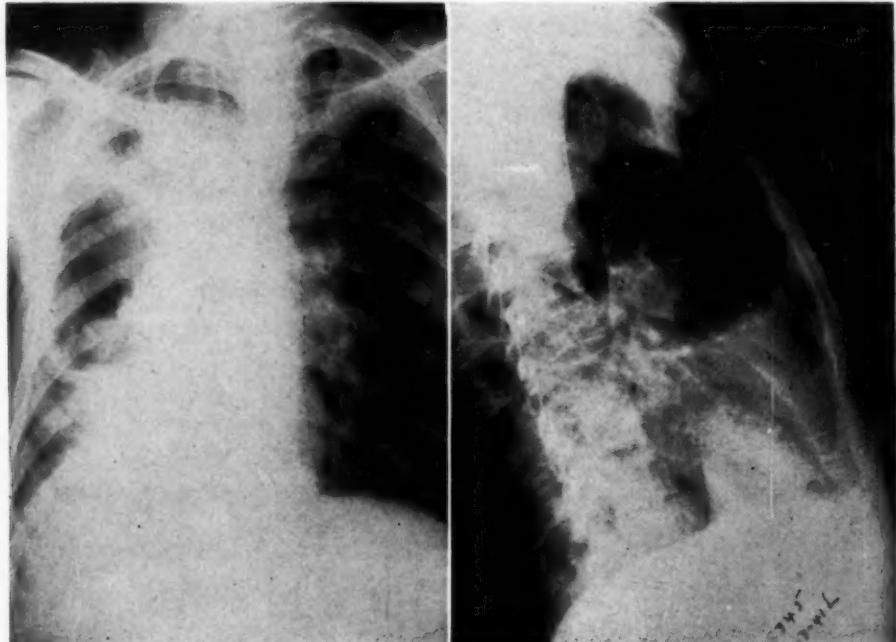


Fig. 1

CASE XII

Fig. 2

Fig. 1—Large cavity, left upper lobe. Fig. 2—Lateral view.

cation. A diagnosis of lung abscess was made. At the time of admission to the hospital 12/13/41 he had lost 40 pounds in weight.

Physical examination on admission revealed evidence of weight loss and typical chest signs of cavitation and suppuration, left lung. The liver extended four fingers breadth below the costal margin and seemed to be somewhat irregular. A small lymph node was palpated in the right supraclavicular fossa.

Laboratory and X-ray Findings—The blood count showed moderate leukocytosis and secondary anemia. Urinalysis showed a trace of albumin, feces negative, sputum negative for tubercle bacilli and the electrocardiogram showed marked subnormal voltage of QRS Leads I, II and III.

Report of x-ray studies: Mediastinum shifted moderately to left; large air containing cavity, 6x9 cm., occupies middle third, left lung field; mottled densities present in upper and lower third, left lung field; right lung negative. Barium enema: "Hepatic flexure of the colon lies just above right iliac crest, displaced downward by homogeneous, soft tissue density in right upper quadrant."

Biopsy of right supraclavicular lymph node showed microscopic findings of a metastatic, squamous cell carcinoma of lymph node.

Progress While Under Observation—The patient's course was progressively downhill. He was toxic with a fever varying from 99 to 104° associated with marked perspiration. The sputum was purulent with occasional blood streaking and averaged 200 to 300 cc. daily. Patient died 1/19/42.

Diagnoses—(1) Carcinoma, squamous, bronchogenic, main bronchus, upper lobe, left lung, with metastasis to the liver, the kidney, mediastinal and abdominal lymph nodes. (2) Abscess, pulmonary, chronic, severe, upper lobe, left lung, secondary to No. 1. (3) Bronchiectasis, chronic, lower lobe, left lung, severe, and lower lobe, right lung, moderate.

Comments on Case—This case illustrates the secondary effects of a bronchial carcinoma, including bronchiectasis, atelectasis, and marked abscess formation. A diagnosis of a primary lung abscess was made prior to hospitalization and when a true diagnosis was finally made by a biopsy of a lymph gland it was too late to give the patient the benefit of surgery.

CASE XIII

Neoplastic lesion, believed to be chorionepithelioma, right lung. Demonstrating use of diagnostic pneumothorax and study of pleural fluid for cancer cells.

O. R. N., white male, age 25; Register No. 178134.

History and Physical Findings—The patient was apparently in good health until April, 1941, when he developed tender swellings of tissues beneath both nipples and was diagnosed bilateral mastitis. This lasted about a month but he never felt right after that time. About the middle of September dull aching pains developed in the area of the right nipple. This gradually increased and involved the right shoulder, radiating to the upper extremity. In October he was hospitalized elsewhere and a large tumor, right lower chest, was found by x-ray. Bronchoscopy was performed and biopsy taken but the latter revealed only ulcerative bronchial mucosa. 1600 cc. of bloody fluid was removed from the right pleural

space and diagnostic pneumothorax performed. Tumor cells were reported present in the fluid removed from the pleural space. Because of suggestive evidence of metastasis to the left lung, the patient was transferred to Walter Reed for the palliative use of x-ray therapy.

On admission the patient appeared weak and toxic and his general condition was poor. Chest examination revealed a hydropneumothorax on the right side but the general examination was otherwise negative. No glands or evidence of primary lesions could be found.

Laboratory and X-ray Findings—Blood count showed moderate secondary anemia and leukocytosis, sedimentation index 28 millimeters, sputum revealed no tubercle bacilli or carcinoma cells and the urinalyses were negative.

X-ray of the chest 12/9/41 showed the right lung partially collapsed by pneumothorax and a large tumor mass roughly 15 cms. in size in the right midlung field. There were mottled densities in the left lung.

Pathological report on the lungs: "The right middle lobe contains a large firm tumor mass 15 cms. in diameter within the middle lobe largely compressing and replacing the lung tissue. The upper, middle and lower portion of the lower lobe are atelectatic with a considerable amount of necrosis in the remaining portion of the lower lobe. The middle and upper lobe contains many tumor nodules from 1 to 2 cm. in diameter. The left lung is studded with spherical elevated tumor nodules ranging from a few mms. to 2 cms. There is no particular relationship to the bronchi or blood vessels. Microscopical examination of the lungs shows large areas of neoplasia associated with extensive hemorrhage. Neoplastic cells appear to be essentially of two types, one type being large polyhedral with granular and vacuolated cytoplasm, contain huge vesicular nuclei showing frequent abnormal mitoses. Some of these cells are multinucleated forms. Other cells are syncytial-like, containing one or more deeply hyper-

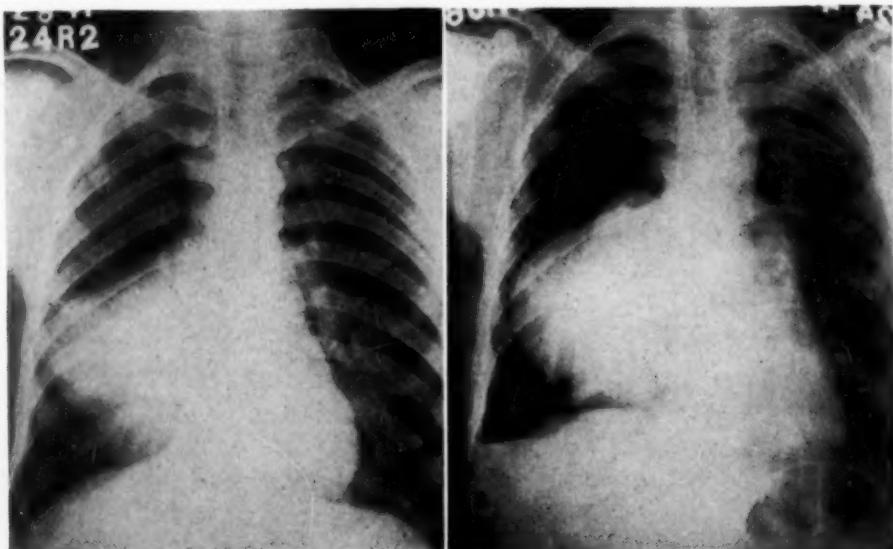


Fig. 1

CASE XIII

Fig. 2

Fig. 1—Large mass, right lung. Fig. 2—After injection of air, right pleural cavity.

chromatic nuclei. Other areas of lung show small groups of similar neoplastic cells, some invading the smaller vessels. There are areas of atelectasis, fibrosis and extreme septal cell proliferation." Neoplastic lesions were also found in the liver, spleen, gastrointestinal tract, pancreas and left kidney.

Progress While Under Observation—The course was rapidly downhill. He complained very much of pains in the right chest, and right shoulder region. There was daily fever ranging from 99 to 102 degrees, and he coughed up blood practically every day not exceeding 2 ounces at any time. He died 12/14/41.

Diagnosis—Neoplasia, malignant, probably chorionepithelioma, severe, all lobes, both lungs, primary origin undetermined. There were associated neoplastic lesions of other viscera.

The diagnosis of chorionepithelioma was made with reservations in this case in view of the testicular findings and absence of definite primary origin elsewhere. Other possibilities considered were primary carcinoma of liver or melanoma.

Comments on Case—This patient demonstrated a problem in diagnosis.

At the onset the only significant finding was the large mass, right mid-lung field and its relationship to a bronchus or pleura or other structures could not be established. In a man of 25 years of age the possibility of benign growths or teratoid tumors must receive first consideration but we must always remember that malignant growths are not uncommon in young individuals. It was of interest that pneumothorax was of some help in establishing the relationship of the tumor to other structures and also that carcinoma cells were found in the pleural fluid.

CONCLUSION

In this analytical review on "New Growths of the Chest" I have presented a classification, diagnostic criteria, and have shown cases that demonstrate some of the difficulties encountered in the management of chest tumors. It has been pointed out that if treatment is to be logical it must be based on careful case analysis. Questions such as the following must be considered:

- 1) Do the signs point to an inflammatory process or to a new growth?
- 2) If the diagnosis is a neoplasm, can we secure a biopsy from the tumor or a metastasis?
- 3) If a pathological diagnosis can be made, should surgical exploration be done?
- 4) If we cannot make a definite pathological diagnosis and obtain a surgical cure, can we wait for further clinical studies, such as x-ray examinations, to rule out lesions not requiring surgery?
- 5) Is the possibility of an inflammatory mass or acquired inflammatory cyst, amenable to rest therapy, great enough to treat the patient conservatively?
- 6) In cases of hilar tumors, does sensitivity to x-ray therapy rule out the advisability of surgical intervention?

These and many other questions must be answered if we are to successfully diagnose and treat new growths of the chest. I can only add in closing that we cannot expect to master completely the problems I have discussed but I have tried to show that we can offer our patient greater hope if we endeavor to make a thorough case study and apply surgical treatment early when indicated.

CONCLUSIONES

En este repaso analítico sobre "Neoplasias del Tórax" he presentado una clasificación y pautas diagnósticas, y he exhibido casos, que demuestran las dificultades que se encuentran en el tratamiento de tumores del tórax. Se ha indicado que si el tratamiento ha de ser lógico debe estar basado en un análisis cuidadoso del caso. Deben considerarse preguntas tales como las siguientes:

- 1) ¿Indican los signos un proceso inflamatorio o una neoplasia?
- 2) Si el diagnóstico es neoplasia, es posible hacer una biopsia del tumor o de una metastasia?
- 3) Si puede hacerse el diagnóstico patológico, debe llevarse a cabo una exploración quirúrgica?
- 4) Si no podemos hacer el diagnóstico patológico bien definido y obtener la curación quirúrgica, podemos esperar el resultado de otros estudios clínicos, tales como exámenes radiográficos, para eliminar lesiones que no requieren operación?
- 5) La posibilidad de la existencia de una masa inflamatoria o quiste inflamatorio adquirido, que puede tratarse con el reposo, es lo suficientemente probable para tratar al paciente en forma conservadora?
- 6) En casos de tumores hiliares, la sensibilidad de ellos a la radio-terapia elimina la conveniencia de la intervención quirúrgica?

Deben contestarse estas y muchas otras preguntas si vamos a diagnosticar y a tratar neoplasias del tórax con buen éxito. Para terminar debo añadir que no podemos esperar resolver por completo los problemas que he discutido, pero he tratado de demostrar que si podemos ofrecer mayor esperanza a nuestro paciente si nos esforzamos en hacer un estudio completo del caso y si aplicamos oportunamente el tratamiento quirúrgico cuando esté indicado.

I wish to acknowledge the help and kindness of Lt. Col. Carl J. Lind, M.C., Chief of the Laboratory Service, and Maj. Brian B. Blades, M.C., Chief of the Thoracic Surgery Section, Walter Reed General Hospital, in the preparation of this paper.

Lung Resection for Chronic Pulmonary Infection*

RICHARD DAVISON, M.D., F.C.C.P.

Chicago, Illinois

The development of thoracic surgery under the leadership of a few men, such as Dr. Evarts Graham, has included the most important surgical advances of this period. Statements have been made to the effect that virtually all recent surgical advances are in the realm of thoracic surgery. In this field there are probably no greater successes than those obtained in the removal of portions of the lung for chronic pulmonary infections.

Bronchiectasis is the common condition which lends itself to surgical removal. However, other pulmonary infections that cannot be brought into this classification are also candidates for surgery. Certain cases of chronic lung abscess are best managed by removal of the diseased tissue. Indeed, there is but a fine differentiation between chronic multiple lung abscesses with bronchiectasis and chronic bronchiectasis with abscess formation. Similarly, chronic pulmonary infections with varying degrees of bronchiectasis, atelectasis, pneumonitis and abscess formation which do not clearly fall into the classification of either bronchiectasis or lung abscess, are subjects for lung removal. Also, there is a current trend towards lung resection in certain cases of pulmonary tuberculosis.

BRONCHIECTASIS

Bronchiectasis is a condition which, up to recent times, has had no satisfactory solution. In spite of periods of remission that may accompany medical treatment, the course has been practically always in a downward direction. Although a congenital type of bronchiectasis is well recognized, the acquired type is the one most frequently encountered. The factors in the development of bronchiectasis must include an infection which weakens the wall of the bronchus and a dilating force. In my opinion, bronchiectasis frequently develops as a sequela to atelectasis of the lung. The etiological factor then is any one of the many causes of atelectasis. The common development of bronchiectasis distal to bronchial obstruction influences me to believe that in many cases of bronchiectasis some form of bronchial obstruction was a very important factor in the etiology. Distal to the obstruction, infection fulminates resulting in weakening of the bronchial wall and absorption of the

*Presented before the Southern Chapter, American College of Chest Physicians, Cincinnati, Ohio, November 18, 1943.

cartilage. The dilating force may be the accumulation of pyogenic materials or may be the atmospheric pressure acting against the negative intrathoracic pressure after the bronchus is reopened.

Bronchiectasis most frequently has its onset in the early decades, although symptoms may appear in any period of life. Sometimes there may be a definite incident following which symptoms develop, such as pneumonia, lung abscess, empyema, or aspiration of a foreign body. Again, there may be merely gradual development of symptoms. The usual story is one of frequent colds with cough and expectoration, which may be seasonal in character. Other symptoms, such as fever, night sweats, cardiac acceleration, weight loss, etc., may be present in varying degrees. Dyspnea, cyanosis, clubbing of the fingers may become evident in the later stages. Physical findings will vary with the extent and location of the involvement.

The final diagnosis, in general, depends on x-ray studies after the instillation of iodized oil. A thorough study must include the outlining of bronchial radicles to all lobes. This is particularly important if surgery is contemplated.

Every case of bronchiectasis should, I feel, be considered for possible lung resection. Unfortunately, however, many cases present themselves in a stage where because of age, general condition, and extent of involvement, surgery is out of the question. These patients can often be somewhat benefited by conventional medical measures, most important of which is faithful postural drainage. Others can be benefited by periodic bronchoscopic aspirations. Minor surgical measures, such as phrenic nerve operation, have been applied and, for a time, this procedure was quite widely adopted. The trend at the present time is to discourage the use of this operation in favor of more direct surgery.

In the light of our present knowledge, the only cure for bronchiectasis lies in the surgical removal of the diseased tissue. Results are often dramatic. For practical purposes, however, surgical measures are feasible only in those cases in which the disease is unilateral, especially when but a single lobe is involved. However, total pneumonectomy and multiple lobe resections have been performed successfully.

CHRONIC LUNG ABSCESS

Chronic lung abscesses of long standing, either single, multilocular or multiple, have, in general, no answer in medical treatment. The conventional thoracotomy for surgical drainage often has not produced satisfactory results. The etiological factor is any one of the causes of lung abscess. The reason for chronicity has often been failure of establishment of proper surgical drainage in the early stages. I believe that inadequate bronchial drainage is an important

factor in chronicity. An eventual cure can sometimes be accomplished by thoracotomy for drainage of these abscesses or by lung destruction after the manner of Graham's cautery lobectomy. If the patient's condition permits, however, I believe the procedure of choice is surgical removal of the diseased area.

OTHER CHRONIC PULMONARY INFECTIONS

I have recently encountered a number of cases that do not fall clearly into the classification of bronchiectasis or lung abscess. Symptoms are similar: cough and expectoration of purulent material, and manifestations of the infection, such as fever, weight loss, etc. Pathologic specimens reveal some degree of bronchial damage with bronchiectasis, atelectasis, pneumonitis and small abscesses.

Medical approach, including chemotherapy, has not favorably affected the infection or does not bring about a cure of the condition. As time goes on the pathology gradually extends. Here again, I believe, although the causative factor may not be clearly demonstrated, that there often is some mechanism in effect which interferes with bronchial drainage. After medical measures have proven unsuccessful these cases too should be considered for lung resection. The results may be highly successful.

Certain cases of pulmonary tuberculosis with bronchial occlusion have, up to the present time, presented an almost hopeless problem. Collapse measures have been ineffective and the clinical course almost uniformly progressively downwards. For this type of case lung resection seems to offer the only salvation. Very encouraging results have been reported, the most extensive work, to my knowledge, having been performed by Richard Overholt of Boston.

I have gone through the period of attempted resection of other tuberculous lesions, notably tuberculosis of the intestines, in which results were very discouraging; so that even though I have no great personal experience with lung resection for pulmonary tuberculosis, I believe such operations must be applied with extreme caution. However, I am sure that, in this particular type of case, surgical removal can justifiably be attempted and, with improved technic of these operations, may prove highly successful in a small group of cases.

A discussion of operative technique does not seem advisable at this time. The best description of the technique of lobectomy with which I am familiar is that given by Graham and Blades, published in *The Journal of Thoracic Surgery*. The best description of the technique of pneumonectomy with which I am familiar is that given by Rienhoff in the same publication.

CONCLUSION

Various types of chronic pulmonary infections are amenable to surgical procedures, removing the affected lung areas. Results may be dramatically successful and attainments can be favorably compared to those obtained by the most beneficial accepted procedures in present-day surgery.

CONCLUSION

Varios tipos de infecciones pulmonares crónicas pueden ser tratados por medio de procedimientos quirúrgicos, extirpando las zonas afectadas del pulmón. Los resultados pueden dar buen éxito en forma espectacular y pueden compararse favorablemente con los resultados obtenidos por los más beneficiosos procedimientos aceptados de la cirugía moderna.

The Relative Importance of the Anatomic and Physiologic Concept in Tuberculosis*

J. D. RILEY, M.D., F.C.C.P.
State Sanatorium, Arkansas

With the modern instruments of precision which may be used in the diagnosis of tuberculosis of the lungs, I believe that we are prone to underestimate the value of clinical symptoms in the diagnosis, treatment and prognosis of tuberculosis. It is conceded that with properly taken stereoscopic x-ray pictures supported by fluoroscopy and sectional x-rays a competent examiner may have a very definite opinion of the amount of pathological involvement in the lungs. One x-ray picture (or x-ray pictures taken at one time) is a picture of what is in the chest. Two x-ray pictures with a sufficient time interval give us a composite picture of what is happening in the chest and will enable us to determine whether the lesion is stationary or whether the pathological activity present is progressive or retrogressive; but no x-ray picture or series of x-ray pictures will determine the presence of clinical activity or the degree of clinical activity present.

I believe that with the modern methods of diagnosis and treatment of tuberculosis the trend of the medical profession has been more and more to the study of the anatomy of the human body. Students are taught to know anatomy and to diagnose and treat diseases according to the anatomic pathology found. Physicians are inclined to give more importance to form and structure than to function. They are influenced more by evidence of pathology than by clinical symptoms. Anatomy and pathology have been given far more consideration than disturbance of function in medical discussions. The demonstration of a specimen or microscopic slide showing deviation from normal affords much satisfaction to the demonstrator and is received by the profession enthusiastically.

However, it is a fact that changes in function produce symptoms which are the physiologic pathology present and on which we must depend largely for our diagnosis. Furthermore, the restoration of normal function is the purpose of therapy. So much consideration has been given anatomic pathology that we are prone to forget the physiologic pathology which really means so much in the diagnosis

*Presented before the Southern Chapter, American College of Chest Physicians, Cincinnati, Ohio, November 17, 1943.

and treatment of disease. Clinical symptoms have not been given the consideration which they deserve. Accepting anatomic pathology as our basis for the diagnosis and treatment of disease has led to the grouping of specialists according to the organ involved. Consequently, if the same organism affects the throat, heart, lungs or appendix, we have the throat specialist, heart specialist, lung specialist or surgeon, respectively. Anatomically, pneumonia is confined to the lungs. Likewise, typhoid is confined to the intestines; yet pneumonia and typhoid are both general infections. Tuberculosis is also a general infection, and its intelligent study and treatment calls for an internist who has a broad view of not only the actual anatomic involvement but also of the clinical symptoms which indicate clearly the balance that exists between a patient's disease and his resistance.

Disease converts normal anatomy into pathology, but this would not be important if it caused no disturbance of function. Experienced tuberculosis workers know that the anatomic change may be very extensive, with little change in function, and not be serious. But marked disturbance of function, with little or much pathology, is always serious. One cannot give a dependable prognosis from the anatomic concept. No physician would offer a prognosis based entirely on the anatomic pathology found. But the clinical symptoms representing the physiologic pathology or the patient's reaction to his disease, mean much toward a prognosis. Of course, a broader concept is obtained by a combination of both the anatomic and physiologic concept. Following the general trend to accept form and structure as being more important than disturbance of function, the classification of tuberculosis is based on the anatomic involvement, which is not nearly so important as the clinical symptoms.

Turban's classification of tuberculosis into three stages is the basis of all adopted classifications. It is based on the amount of involvement. It was his opinion (as stated by himself in discussing his classification before the International Tuberculosis Conference in Berlin, in 1908) that no other factor played such an important part in the prognosis of tuberculosis as the extent or spread of the disease. The Turban-Gerhardt classification adopted by the International Conference at Vienna in 1907 follows the same anatomic scheme suggested by Turban, but lessens the amount of involvement for the various stages.

Our National Tuberculosis Association followed the dominant anatomic basis but added a physiologic concept by requiring the consideration of the patient's symptoms in determining his status. This was real progress. But even in this classification the anatomic entirely overshadows the physiological concept. The American Sanatorium Association, in 1916, adopted a classification further

amplifying the importance of symptoms and permitting three classifications according to symptoms under each anatomic division, which was further modified in the "Diagnostic Standards and Classification of Tuberculosis" adopted in 1940 by the National Tuberculosis Association, and which now offers the following combination:

Minimal, A, B, C, & D

Moderately advanced, A, B, C, & D

Far advanced, A, B, C, & D

Turban offered his classification as a means of arriving at uniformity so as to enable physicians properly to arrive at more or less definite and dependable conclusions as to the results of treatment. He believed that involvement was the most important factor in the prognosis. He aimed at uniformity. But in order to have uniformity all examiners would have to examine with equal ability and equal care and would have to use equal judgment in interpretation. Such is not the case. Without the aid of the x-ray, the findings of different physicians in any case of tuberculosis vary considerably and even with aid of the x-ray there is often a wide difference of opinion. The attempt at such a classification, however, has helped materially. It has demonstrated that the cases with lesser involvement without marked physiologic disturbance, are the more favorable cases for treatment. But it has further demonstrated to more careful observers that anatomic involvement without consideration of symptoms is a very poor basis for a prognosis. The physician attempting to follow these classifications is apt to have impressed on his mind that the extent of the lesion is the greatest factor and that the seriousness of the case can be mechanically measured. It causes him to concentrate on the extent of the disease instead of on the condition of the patient.

While the classifications used in America today are a combination of the extent and character of the lesion on the anatomic side and the clinical symptoms of the patient on the physiologic side, nevertheless the anatomic side remains uppermost in the minds of most observers. They attempt to assign mathematical exactness to processes which are by nature most inexact. While uniformity is the aim of all classifications, it is impossible in actual practice.

Strains of tubercle bacilli are of different virulence and patients have different resistance; therefore, it naturally follows that the balance existing between the disease and patient must differ. Likewise, the ability and methods of examiners differ. Many factors on the part of the patient must be considered, such as race, age, constitution and economic status. These and many other factors (all) differ in each patient. These variations make uniformity in disease unobtainable. The use of the x-ray has helped materially in

determining the extent of the disease. But even the x-ray is not by any means definite, since the human element must enter into the technic of taking pictures and even more into the interpretation of the same. As the x-ray often reveals the inability of the internist to determine the character and extent of disease in the lungs, likewise the autopsy often exposes the faulty interpretations of x-ray pictures.

I should like to ask if anyone can arrive at mathematical exactness as to the involvement in a given lung by the aid of both physical examination and x-ray finding? Furthermore, if all the varying factors could be eliminated and a definite amount of anatomic involvement could be established, would this give us a prognosis? After all, the ultimate reason for classification is to be able to determine the probable result in a given patient.

The divisions of first, second and third stage, or of minimal, moderately advanced and advanced are purely arbitrary. They in no way tell us what is taking place. It is far better to have a whole lobe involved with the non-virulent fibroid type of tuberculosis than to have a small spot one inch in diameter necrosing. The first type of lesion shows that the fighting balance is on the side of the patient. Furthermore, a patient who withstands an extensive active lesion well has a far better chance to get well than one who withstands a small active lesion poorly. What patient and physician want to know is not how much lung is involved but how is the individual patient reacting to the disease that he has and is he able to overcome it? Is the balance in favor of the patient or is it in favor of the disease? Are the normal smooth-working cells of the body tissues disturbed and if so to what extent? What is his physiologic as well as his anatomic response toward his tuberculosis? While we cannot and should not fail to consider the anatomic involvement, our chief consideration should be the amount of deviation from the normal physiological working of the body cells which has taken place. The relatively greater importance of the physiologic conception as compared with the anatomic is illustrated daily in our clinical experience. While, all else being equal, the greater the involvement the more serious the disease; yet, the extent of the lesion alone is but a minor point in destroying the patient. Furthermore, at best it cannot be even approximately measured. The amount of disturbance to the normal working equilibrium of the body cells is the chief factor in prognosis—the physiologic rather than the anatomic deviation from normal. Disturbance of function is what brings the patient to the physician, and it is largely on this that the physician must base his diagnosis and treatment as well as his prognosis. The ultimate purpose of the physician and the ultimate hope of the patient is the restoration of normal function.

The physiologic pathology is more easily measured because it is expressed in symptoms.

One patient, after suffering a progressive necrosis destroying a large part of one or both lungs, is able to regain a fair degree of health because his physiologic equilibrium is well preserved in spite of the extensive involvement. On the other hand, we sometimes see a small necrosing spot so disturb the physiologic balance of a patient and so depress his reacting power that the process spreads and becomes a menacing disease. We see, also, sometimes, what seems to be a very slight anatomic lesion, accompanied by mild symptoms and yet healed with the greatest difficulty. Such a case, in my opinion, is of mild virulence but fails to heal with usual rapidity because of the disturbance to the patient's physiologic balance.

In considering the relative value of symptoms one must consider their permanency and their effect on the recuperative power of the patient, as well as their cause. A temperature of 101, continuously, or at frequent and repeated intervals, is much more serious than one of only a few days' duration. It is also more serious if the patient is resting than if he is exercising. It is also more serious in a happy, optimistic patient than if maintained by worry. The rate of the pulse is also more important with the patient on complete rest over a long period of time and if taken carefully, eliminating the effects of exercise, excitement, worry, etc. Loss of weight is serious only when the cause cannot be corrected. Cough, expectoration and the number of bacilli are important only when considered over a long period of time. The same patient, studied when a small spot is necrosing, may raise much more, and examination of the sputum may show a great increase in the number of tubercle bacilli, and yet, in a few weeks the activity in the process may quiet down and the patient may be relatively free of cough and expectoration. The local symptoms of tuberculosis lose largely their significance once the diagnosis of tuberculosis is established.

However, once the fact is established that constitutional symptoms are due to tuberculosis, these symptoms become the best criterion by which we may determine how sick the patient is, what he needs in the way of treatment, and what the outlook is for the patient.

An analysis of all the symptoms of tuberculosis would show that the toxic symptoms are the ones which disturb the physiologic balance of the patient most. Certainly, the cause of death in tuberculosis is not due to the inability of the lungs to furnish oxygen. The cause of death seems to be a disturbance of the physiologic process to such an extent that the cells cannot continue to function in such a way as to keep the body in a state compatible with life.

The symptoms may be divided into three divisions: (1) reflex symptoms, (2) symptoms due to the process (*per se*) (3) toxic symptoms. Reflex symptoms are hoarseness; cough, digestive disturbances, (hypermotility and hypersecretion) circulatory disturbances, chest and shoulder pains and flushing of face. Symptoms due to the process *per se* are spitting of blood, sputum, frequent and protracted cold (tuberculous bronchitis) and pleurisy (tuberculous pleuritis). Toxic symptoms are malaise, fatigue, weakness, nervousness (digestive disturbance), increased metabolic rate, loss of weight, increased pulse rate, night sweats and fever.

With this grouping, one can readily see that the reflex symptoms and those due to the disease process *per se* are not the ones which cause the serious changes in the body. It is the toxic group, or clinical symptoms, which really endanger life. The toxins of tuberculosis cause a more or less harmful stimulation of the nerve cells, producing a general nerve instability or nervousness. They also disturb the endocrine system, causing a loss of the chemical control of the body, with an increased acid condition of the tissues and with a diminution of the free water of the body, which interferes with the normal chemical activity of the body that should take place, and without which the body cannot be kept in a state of health.

Consequently, the prognosis in tuberculosis is individual. It does not depend on the extent or severity of the disease, but upon the manner in which the patient is able to preserve his physiologic equilibrium in spite of the extent and severity of the disease. Two patients may be suffering from tuberculosis of similar extent and intensity, as far as we are able to determine; and yet, one may sleep well, eat well, gain weight, and gradually lose his temperature, while the other sleeps poorly, is troubled with indigestion, loses weight and gradually grows worse. What is the difference? It is not the disease, but the manner in which the two patients react toward the disease. It is not the anatomic extent or the intensity of the involved area in the lung that makes the difference, but the difference in the individual physiologic equilibrium of the two patients.

The serious symptoms are always the toxic ones and are associated with clinical activity. Regardless of what symptoms may be most prominent, any patient who, for any great length of time, shows unfavorable reaction to the toxins, must be classed as unfavorable. In other words any patient with an increase of clinical symptoms after a prolonged period of bed rest offers a serious prognosis.

The clinical symptoms, finally, are the key to the prognosis. The classification of tuberculosis into its anatomic stages has its place, but it is of minor importance as compared with the clinical symptoms.

The anatomic concept leads to a mechanical attitude toward the disease and leads away from the personal element, which is the more important factor of the disease. On the other hand, the physiologic concept leads to the personal element and encourages the study of each patient as a reacting organism. While a combination of both the anatomic and the physiologic concept is necessary to a clear, definite understanding of any case of tuberculosis, nevertheless, the prognosis depends chiefly, if not entirely, on the physiologic reaction of the patient, regardless of the extent or intensity of the disease.

RESUMEN

El concepto anatómico en la tuberculosis conduce a una actitud mecánica hacia la enfermedad y nos desvia del elemento personal, que es el factor más importante de la enfermedad. El concepto fisiológico es el mejor criterio a nuestra disposición para determinar el estado del enfermo, qué tratamiento necesita y cuál es el pronóstico. El concepto fisiológico conduce hacia el elemento personal y estimula el estudio de cada paciente como un organismo reactivo. Aunque la combinación de ambos conceptos, anatómico y fisiológico, es necesaria para obtener una comprensión clara y bien definida de cualquier caso de tuberculosis, el grado de actividad clínica, el tratamiento y el pronóstico dependen principalmente, si no del todo, de la reacción fisiológica del paciente revelada por los síntomas clínicos, y no de la extensión o intensidad de la enfermedad.

DISCUSSION BY ALVIS E. GREER, M.D., F.C.C.P.

Houston, Texas

A discussion of the relative importance of evaluating the problems of tuberculosis from the anatomic and the physiologic concepts leads us into a fertile field for discussion. Questions of prevention, diagnosis, prognosis, and treatment are involved, which would make even a casual perusal of the subject monumental.

Dr. Riley has presented us with a clear and scholarly appraisal of the principles to be considered. There seems, at this time, a general concensus of opinion that the problems relating to tuberculosis, as an infection, and as a disease, must be dealt with in their entirety, and not through a single factor, in attempting to unravel their many secrets.

It has seemed to me a proper conception to consider all the available factors, anatomic and physiologic, as well as the influence of all the predisposing factors, which may have modified the resistance of the patient to the tubercle bacillus, in attempting to arrive at a logical conclusion regarding the diagnosis, prognosis, and treatment of tuberculous disease.

A classification of tuberculosis based on two main divisions,

namely, the primary infection, and the reinfection or the superinfection form, would aid us in the many problems of diagnosis and control. It is well known that the reinfection and the superinfection types, constituting most of clinical evident tuberculosis, are recruited mainly from the division of primary tuberculosis infection. This latter group, through the development of immunity to the tubercle bacillus and its toxins, and the following sensitization of the body tissue cells to the tuberculo-protein, renders the primarily infected, but not clinically demonstrable and seemingly healthy individual, susceptible to a future superinfection from without or a reinfection from within his body. In such a manner the so-called "adult" type of tuberculous disease is born.

The greatest problem we have to deal with is how can we separate these cases of primary tuberculous infection into clinical groups through which we may anticipate their complete recovery of their infection, or their later progression into active, demonstrable tuberculous disease. We must admit at this time that it is impossible to postulate a definitely clear classification of these potentially diseased reactors.

There are capable physicians who cautiously hint that it might be advisable to limit the ravages of tuberculous disease by the production of more primary infection, with the resultant allergy, and then followed after another later infection by a more benign disease process. It would seem to me more rational to ferret out these individuals with primary infections, by following some type of diagnostic classification of primary tuberculous infection, perhaps, best based upon single, or combined, data of localization, reflex or toxic symptoms. We well know that in reactors to the tuberculous test our available diagnostic methods, will reveal localizing evidence of pathologic changes in about one-fourth of the patients. It is the larger, non-demonstrable group of tuberculous infections, constituting 75 per cent of all cases, which in my opinion are too hastily passed by. Physicians too frequently look upon the child with a positive tuberculous reaction, and with no demonstrable findings of tissue pathology, as a permanently healed individual, not to be reckoned with in the future as a likely candidate for the development of tuberculous disease.

The private practitioner must be cautioned to include in his classification of tuberculosis an intensive study and evaluation of the reflex and toxic symptoms of tuberculous disease. There is little doubt in my mind that many children that do not have "non-demonstrable" tuberculous infection are in reality suffering from tuberculous disease, which by our present standards we are unable to diagnose properly. Herein lies a fertile field for us to explore—the separation of the actually diseased from the more benign indi-

viduals, included in the group of non-demonstrable primary tuberculous infections.

DISCUSSION BY SYDNEY JACOBS, M.D., F.C.C.P.

New Orleans, Louisiana

Dr. Riley has very clearly shown us that we must consider physiological ideas in surveying the course of a patient with pulmonary tuberculosis. Three factors are of paramount importance to this connection:

- 1) Despite the utilization of all methods that are at our disposal today, we do not know how to estimate the function of a lung adequately. The newer methods of studying respiratory function offers us great promise, but we still have much to learn concerning them.
- 2) The tremendous differences in the inherent capacity for disease. Some people with only demonstrably small lesions have pronounced symptoms; other people with much larger lesions have only a few symptoms.
- 3) The practical application of these functions. When we have learned how much function exists in a given lung and the patient's inherent capabilities for response to treatment, we shall be able better to determine which patient should have the more radical form of chest surgery and which should be given the benefit of prolonged hygienic dietetic regimen.

Treatment of Tuberculous Cervical Adenitis With Vitamin A and D Ointment

WALTER RAAB, M.D.*

Glen Gardner, New Jersey

Since no set rule for management of tuberculous cervical adenitis has been established,¹ treatment may be either surgical or conservative. However, infected glands sometimes caseate, necessitating incision with drainage to prevent formation of spontaneous sinuses which commonly heal slowly and leave typical scar tissue.

A case of tuberculous cervical adenitis in our hands began to caseate under conservative treatment and threatened to break down. Incision was made but failed to heal and despite conventional local therapy, pus drainage continued. Exposure to artificial sun lamp increased both drainage and inflammation and was therefore discontinued. Vitamin A and D Ointment** was applied around the incision. Results were so remarkable a report of the case is thought to be justified.

Case—On August 11, 1943, a 5-year-old colored girl with primary pulmonary tuberculosis was admitted. Her family history revealed her father's having died of tuberculosis. X-ray of the chest showed involvement of right hilar glands. The Mantoux test was positive.

Infected tonsils were removed (August 31st). Her stay in the hospital was uneventful until the beginning of October when, for the first time, a painless swelling on the right side of the neck was noted. The swelling increased in size and was accompanied by an elevation of evening temperature. Throat and mouth showed no signs of infection. White blood cell count (October 19th) was 16,200, (neutrophils 76 per cent, lymphocytes 21 per cent, monocytes 3 per cent). At this time both the local cervical swelling and the temperature elevation were maximal. On October 26th the white blood cell count was 10,400. The affected glands were still enlarged and temperature was normal.

Treatment thus far had consisted of bed rest, cod liver oil by mouth, and local application of ichthyl ointment. No retrogression was noted. After consultation, the surgeon considered removal of the involved glands. However, before surgery could be scheduled some of the glands caseated and further conservative

*New Jersey State Sanatorium, S. B. English, M.D., F.C.C.P., Superintendent.

**White's Vitamin A and D Ointment.

therapy was advised. When the skin above the caseated glands threatened to break, incision with drainage was performed. Previously (Nov. 5 and 6) 3 cc. of pus had been aspirated from the swelling and was examined bacteriologically. Smears and cultures revealed no tubercle bacilli or other organisms. After the incision, the purulent discharge persisted. Three days after artificial sun lamp had been applied to the involved area, this treatment had to be discontinued because of a very marked local reaction with inflammation, swelling of the remaining non-caseated glands and increased purulent discharge. When the suppurative drainage continued without any sign of improvement from November 8th to December 6th, we considered our situation to be a rather hopeless one. At this point, locally applied Vitamin A and D Ointment proved most beneficial. In three days inflammation and swelling had disappeared. Suppuration was controlled and the incision healed. The effect of the application of the Vitamin A and D Ointment was so striking that it is difficult to describe our experience. After application of the ointment for some time, complete healing and a fine linear scar resulted.

COMMENT

Topical application of cod liver oil was first reported by Lohr in 1934.² Since then, Brandaleone and Papper³ have shown that the absorption through the skin of the vitamins A and D of cod liver oil is more effective in healing wounds than oral intake of the oil. Getz⁴ and Hardin⁵ have stated that the active stimulating agent in the promotion of granulation and epithelization is chiefly the contained vitamins A and D in combination and in the same ratio as found in cod liver oil. Continued experimental and clinical investigations have established the topical application of vitamins A and D as a procedure of therapeutic value. A search of the literature, however, failed to reveal any reference to the application of vitamins A and D to the skin above tuberculous glands. Therefore, it is felt that this may be the first report on the effectiveness of treatment of tuberculous cervical adenitis with local applications of vitamins A and D.

Because such cases are very rare in our children's service, a comprehensive study is impossible. This report is submitted in the hope that it may encourage others, more advantageously situated, to undertake an investigation for the purpose of substantiating our observations.

Even though biopsy was not done in the case reported, a diagnosis of tuberculous cervical adenitis was made, based upon the clinical course, sterility of aspirated pus and the absence of any infection in the mouth, teeth, nose or throat.

SUMMARY

In a case of tuberculous cervical adenitis with caseation, the mass was incised. The incision drained for nearly four weeks. Exposure to artificial sun lamp aggravated the inflammation and increased the drainage. Local treatment with Vitamin A and D Ointment for three days accomplished complete healing, with formation of a fine linear scar.

RESUMEN

En un caso de adenitis cervical tuberculosa con caseación se hizo una incisión en la masa. La incisión supuró por cerca de cuatro semanas. La exposición de la incisión a la lámpara solar artificial agravó la inflamación y aumentó la supuración. El tratamiento local con ungüento de vitaminas A y D durante tres días obtuvo la curación completa con la formación de una fina cicatriz lineal.

REFERENCES

- 1 Homans, John: *A Text Book of Surgery*, C. C. Thomas, 1935.
- 2 Lohr, W.: "Die Behandlung von frischen und alten Hand- und Fussverletzungen mit Substanzverlusten mit dem Lebertran-Gipsverband," *Chirurg.*, 6: 5, 1934.
- 3 Brandaleone, H., and Papper, E.: *Ann. Surgery*, 114: 791-798, (Oct.) 1941.
- 4 Getz, H. R.: "Cod Liver Oil Therapy in Experimental Tuberculosis," *Proc. Soc. Exper. Biol. & Med.*, 38: 543, 1938.
- 5 Hardin, C.: "Cod Liver Oil Therapy of Wounds and Burns," *South. Surgeon*, 10: 301, (May) 1941.

Chest Diseases in the Aged*

ARNOLD S. ANDERSON, M.D., F.C.C.P.
St. Petersburg, Florida

Old Age is the final canter of life—the last lap of a long search for happiness.

Cicero, in his great essay on old age written in his 84th year, said, "Men who have no resources in themselves for securing a good and happy life find every age burdensome. But those who look for all happiness from within can never think anything bad which nature makes inevitable." This is quite true throughout life as regards the way people accept their illnesses. If they take adversity philosophically while young the chances are they will view it similarly when old. It's the qualities within one rather than the passing of time that makes for a gracious old person or a miserable one.

In the past we have stressed old age too much from the standpoint of chronological rather than physiological age. Some people are old at 50 and many are young at 70. It is function that counts—the ability to do the job. I have in mind an 81-year-old man who came to live in our city. With the war on, he deplored the fact that a man of his mechanical ability and training should be benched when manpower was at a premium. Because of his good health he was advised to go back to Detroit and go to work. He did so and a few months later wrote that he was working every day and was making more money than he had ever made in his life. His physiological age was still young at 81.

Lately there has been a decided interest centered on a better medical understanding of the older age group. Geriatrics at its best should have for its purpose the *preservation of function* rather than the mere *prolongation of life*. The great barrister, Judge Oliver Wendell Holmes, having passed his 80th birthday but still clear-eyed, wise and alert once stated, "Not to function is not to live." And this well epitomizes the best purpose of life whether young or old.

Most normal people desire a long life with good health. How to attain it has been a subject of speculation for ages. From available statistics at present we learn that the positive findings for a long life are as follows:

- 1) Inheritance.
- 2) Marriage. Just why a married man should live longer than a bachelor may seem strange, but statistics vouch for it nevertheless.

*Presented before the Southern Chapter, American College of Chest Physicians, Cincinnati, Ohio, November 17, 1943.

3) A subtropical climate. The reason given is that men so located encounter less of the wear and tear of life.

4) A calm and peaceful disposition.

It all seems to add up to this advice, "Get married, young man, go south and keep calm."

If one aspires then to reach old age, it would seem advisable to be guided by the aforementioned findings.

I have selected the subject of chest diseases in the aged because afflictions of the heart and lungs are major causes of death in old people; also because I wish to point out certain changes that occur in senile tissue that alter the clinical course of disease. Fifty per cent of old people die from cardiovascular disease and about twelve per cent from respiratory afflictions.¹

In one of our local hospitals we found that one-third of the total admissions during a winter month were people over 65 years of age, and 40 per cent of them had diseases of the heart and lungs.

We see then that chest diseases in the aged concern a sizeable part of the ills we treat. The diseases of the chest that afflict the aged are the same ones that affect the younger age group, but the course they pursue is frequently modified by the aging process. Time changes the quality of tissue. There is still doubt as to what constitutes normal old age tissue because disease may have played a hand in these changes. Nevertheless, the alterations generally found are:

- 1) Loss of tissue elasticity.
- 2) Diminished muscle tone.
- 3) Muscular atrophy.
- 4) Increased fibrosis.
- 5) Nerve degeneration, leading to a decreased sensitivity to stimuli.

In the respiratory system² we find that the cilia of the epithelium of the bronchial tree becomes sluggish. Broncho-eliminative function is diminished so secretions are apt to be retained, leading at times to such diseases as bronchitis, pneumonia and atelectasis.

The alveoli lose their elasticity. They become distended. There is increased fibrosis. The supportive structures become fixed and the emphysematous chest results.

The connective tissue which is supportive in function tends to become dehydrated with age and for that reason some believe it becomes more brittle and fixed.

The years also bring important changes to the pulmonic nerves. These nerves arise from (1) the vagus, which supplies the afferent nerves of the bronchi to the respiratory center, (2) the upper thoracic spinal nerves which supply certain areas of the visceral pleura. These pulmonic nerves carry important impulses, pertaining to

respiration and reflexes. In senility there is a nerve ending degeneration which leads to a diminished tissue sensibility to stimuli. This apparently accounts for the extensive lesions without marked symptoms that so frequently develop in senile chests.

The pulmonic blood vessels stiffen with the years. An interesting change here is that after 50 years there is frequently a thickening of the intima and a moderate degree of fatty change. After 70, it is constant. Atheromatous changes are less pronounced in the pulmonic arteries than in the aorta.

The lymphoid tissue in the lung, as described by Miller, increases from childhood to old age. Perhaps this accounts for the chronicity of certain pulmonary lesions in the old.

The vital capacity as shown by Myers and Cady meets with a pronounced drop after 60 years of age. Even as much as 50 per cent may be noted.

Thus we see that the lung undergoes structural alterations that will more or less influence its response to disease.

The heart³ and its vessels take on sclerotic changes with age. Fat deposits increase along the grooves of the coronary vessels—cholesterol and calcium form within the arterial walls. It is interesting to note that the anterior descending coronary branch ages 5 to 10 years earlier than the posterior branch.

The valves lose their elasticity, there is increased fibrosis, fat and calcium deposit; and so the valve leaflets, unable to nicely approximate, begin to murmur.

An interesting change in heart muscle has recently been touched upon. Animal experiments have shown that with old age there occurs a decreased ability of heart muscle to consume oxygen. One wonders if this has any bearing on the therapeutic use of oxygen in heart disease.

Valuable knowledge as to the condition of the heart comes from the electrocardiogram. The important findings in the senile heart are:

- 1) A decline of voltage.
- 2) A tendency toward T wave inversion.
- 3) There is frequently a lengthening of the QRS wave.

It is evident from all this that when chest diseases strike the aged they fall on soil which is quite different from that of the younger group. Changes have occurred which in one way or another alter the course of the disease. These changes frequently camouflage the deadly design underneath. On the other hand they may lend a protective influence to the body's battle against disease.

Let me illustrate this by the following brief cases. But first let me say that having qualified for membership in this society by virtue of

my successful cures, and having been privileged to appear on the program, I now deem it safe to report some of my failures.

A practicing attorney aged 74 was admitted to the hospital because of extreme fatigue. On previous visits, after a week or two of rest, he always recovered and resumed work again. This time he also complained of a slight chronic cough with some expectoration, which had been a mild inconvenience to him for many years. Physical and laboratory examinations were essentially negative. He was suffering from symptoms of senescence. To prove to him that he didn't have tuberculosis we had a sputum examination made which was negative. A chest x-ray was not made because it seemed that that would be carrying the diagnosis of senescence a bit too far. Let me state here that the joys of a confident spirit are frequently short-lived.

The patient returned to work after a week's rest in the hospital and all seemed to go well. But one night my sleep was interrupted by an urgent call. My patient had had a copious pulmonary hemorrhage and he was disturbed about it. So was I. He was readmitted to the hospital and we forgot all about his senescence. His chest was x-rayed and in the middle lobe of his lung was a beautiful cavity, measuring 2½ by 3½ centimeters. We hastened with another sputum to the laboratory and found it teeming with acid-fast organisms.

I explained to his daughter that I would not advise collapse therapy because of his age, but that bed rest would make his remaining days comfortable. The treatment was right but the prognosis was wrong. After a few weeks of wavering he began to mend. To my astonishment his cough, expectoration, fever, sedimentation rate, appetite and weight all improved, and after a few months' time he was symptom free and 75 years of age! We again x-rayed his chest and found that the cavity had completely closed. He returned to his gainful occupation feeling better than he had for years.

This case is cited to show, first, the insidious and masked onset of a serious infection with only slight symptoms to indicate its presence. One reason for this may well be the diminished sensibility to stimuli that occurs in old age through the degeneration of nerve endings. Second, the tendency to heal of a large lesion which in youth would tend more to spread and produce symptoms. One reason for this could be the increased inclination on the part of old tissue to produce fibrosis.

The frequency of silent coronary occlusions in the aged and their onsets under the cloud of a so-called gas attack is well recognized. The following case illustrates how "gas in the stomach" can be the prelude of greater things to come.

I had treated this active and alert 83-year-old lady for some years

for hyperchromic anemia. Besides this ailment, she also had occasional attacks of "acute indigestion." These she had experienced since youth. They were produced by fatigue or emotional upsets and were relieved by rest and sedation. I think the diagnosis of gastric neurosis was correct. One day she had what was considered a typical attack. With positive conviction I put her on rest and sedation and calmed her fears. After 48 hours of intermittent periods of from slight to rather severe gastric distress she began to complain of precordial oppression. I began to suspect an occlusion. A cardiogram showed a recent posterior coronary occlusion. Morphine, oxygen and rest relieved her but she wondered, and so did I, why this had not been instituted sooner. Gastric neurosis may indeed be the devil's handiwork.

Time will not permit a consideration of other chest diseases modified by the aging process. It seems wise to remember, however, that any of these diseases may be masked by signs and symptoms of senescence. If we are to accept seriously the treatment of old people, it first becomes our duty to diagnose correctly the diseases involved. Otherwise, we may tag senility on too many old people just as we now miss many organic ailments in younger people by the term neurosis.

SUMMARY

Geriatrics should have for its purpose the preservation of function rather than the mere prolongation of life.

Chest diseases in the aged is here considered because diseases of the heart and lungs are major causes of death in old people. Fifty per cent of old people die from cardiovascular disease, and about twelve per cent from respiratory afflictions.

Alterations that occur in tissue with old age are:

- 1) Loss of tissue elasticity.
- 2) Diminished muscle tone.
- 3) Muscular atrophy.
- 4) Increased fibrosis.
- 5) Nerve degeneration.

These changes as they affect the various organs are discussed.

Two case reports are presented to show the difficulties involved in the correct diagnosis of organic disease in the aged. Senescence frequently masks the presence of organic lesions so a plea is made for more painstaking and accurate methods to uncover hidden afflictions in the aged.

RESUMEN

La geriatría debe tener por objeto la preservación de las funciones más bien que la mera prolongación de la vida.

Se trata aquí de las enfermedades del pecho en los ancianos, porque enfermedades del corazón y los pulmones son causas principales de la muerte de la gente vieja. El cincuenta por ciento de los viejos mueren de enfermedades cardio-vasculares, y un doce por ciento de afecciones respiratorias.

Alteraciones que tienen lugar en los tejidos con la vejez son:

- 1) Pérdida de la elasticidad de los tejidos.
- 2) Disminución en el tono muscular.
- 3) Atrofia muscular.
- 4) Aumento de fibrosis.
- 5) Degeneración nerviosa.

Se discute la manera en que estas alteraciones afectan los diferentes órganos.

Se presentan informes relativos a dos casos que demuestran las dificultades que se encuentran en el diagnóstico correcto de enfermedades orgánicas en los ancianos. La senectud frecuentemente obscurece la presencia de lesiones orgánicas, así es que se ruega que se empleen métodos más cuidadosos y exactos para descubrir las afecciones ocultas en los ancianos.

REFERENCES

- 1 Cowdry, E. V.: *Problems of Aging*, 2nd edit., p. 834, Williams & Wilkins Company.
- 2 Ibid., Chapter 9.
- 3 Ibid., Chapter 7.

DISCUSSION

DAVID T. HYATT, M.D., F.C.C.P.

Little Rock, Arkansas

I have enjoyed the general truths discussed in Dr. Anderson's paper but, most of all, I appreciate his frank discussion of his case of the elderly lawyer. If all of us will scrutinize our failures in diagnosis rather than our successful cases, we may not make the same mistakes again. Thereby, we become better diagnosticians.

Looking backward, we see that the error in the attorney's case is the same one that you and I probably have made many times; that is, arriving at the most obvious diagnosis but without all of the facts.

As clinicians we must obtain the complete history, and make a thorough physical examination in all cases; but in chest diseases, whether in the aged or in young persons, certain laboratory procedures are a necessity in every case.

No chest examination is complete without an x-ray study, preferably with a film.

Tuberculosis of the lungs cannot be diagnosed in its earliest stages except with a chest x-ray. If possible to make diagnosis of lung

tuberculosis by clinical examination alone, the true amount of lung involvement can only be determined by x-ray examination.

Routine chest films on apparently healthy employees and applicants for employment in large plants and factories has shown that from one to two per cent have lung tuberculosis, not just so-called scars.

In cases of bronchiectasis or in differential diagnosis between severe chronic bronchitis and mild bronchiectasis, the correct diagnosis is made by means of lipiodol injections into the bronchial tree followed by x-ray films of chest.

Bronchoscopic examination and x-ray films are necessary for correct diagnosis of malignant growths or tumors—primary or secondary—in the chest.

Bronchial carcinoma is much more common than was formerly suspected and is definitely found among the chest diseases of the aged. Symptoms and course of the disease will suggest the diagnosis but bronchoscopic examination is invaluable and a chest film gives great aid in diagnosis.

In cardiovascular disease, which causes approximately half of the deaths in the aged, cardiographic study is essential to correct diagnosis and to a better understanding of the individual case.

In a person over 45, and especially one over 55 years of age, any substernal discomfort or chest pain should make us suspicious of coronary heart disease, a cardiogram or an EKG should be made to clear up the diagnosis.

Not infrequently, as Dr. Anderson has mentioned in his case of the little old lady with attacks of indigestion, a thorough study will show that the pain of acute indigestion is really the pain of a coronary thrombosis.

I have known several patients to have only quite severe epigastric pain, without any substernal or chest pain; and the cardiogram showed typical coronary thrombosis with occlusion, and the patient died of proven coronary heart disease.

May I add my plea to that of Dr. Anderson in his closing statements. It is our obligation as chest physicians to use every means at hand to make a correct diagnosis in each and every case.

DISCUSSION

C. LYDON HARRELL, M.D., F.C.C.P.
Norfolk, Virginia

I read Dr. Anderson's paper with a great deal of pleasure. I regret I could not be present to discuss it in person.

I am inclined to agree with him almost entirely, but will elaborate on a few points.

A large percentage of the patients we see in our office under fifty years of age present symptoms that are chiefly functional in origin. But beyond fifty years of age a great majority usually have some organic disease that is responsible for their symptoms. Consequently, we should give them a good deal of time, examine them thoroughly and try to get to the bottom of their ailments.

An elderly person as a rule, requires more treatment and more attention than a younger individual. They should be made comfortable if possible. Elderly people must not be kept in bed any longer than necessary. A certain amount of rest, both mental and physical, is very important, but if kept in bed too long, you will make invalids of them. They develop a stasis of lower extremities and also in the lungs as a result of faulty circulation. I think it best to keep them on the go and keep them occupied if possible. I know of three physicians who retired just beyond sixty years of age. They are miserable.

As to his "care of chronic cough," I shall differ. I feel that all old patients with a chronic cough and bronchitis should be given a very careful study in order to rule out tuberculosis, atelectasis, emphysema and bronchiectasis, as many old people with a cough usually have one and often two of these diseases at the same time.

A recent study made of the cases seen in my office, covering a period of twenty months, revealed ninety-nine new cases of pulmonary tuberculosis. Of this number 27 or a little over 27 per cent were over fifty years of age, 13 were over sixty years of age. Now, if these individuals were allowed to go and come at will, coughing, sneezing and expectorating without knowing the true cause of their cough, just think of the number of children they will infect. I believe they should be told their real trouble and put on the cure, isolated from all children under sixteen years of age, preferably in a sanatorium. Many of them will respond to treatment, as Dr. Anderson's case did.

Treatment of Pneumonia With Sulfonamide Drugs*

JACK REISS, CAPT., M.C., and ARCHIBALD C. COHEN, CAPT., M.C.
Indianapolis, Indiana

In the twelve-month period from May 1, 1941, to May 1, 1942, 46 patients were admitted to the Veterans' Administration Facility, Indianapolis, Indiana, for the treatment of pneumonia. These patients were poorer risks than average admissions to civilian hospitals in several respects—they were older, there were more complicating diseases, they were transported for longer distances in order to reach the hospital, and they came to the hospital later in the course of the disease. A survey of these 46 cases was made to determine the efficacy of treatment.

The diagnosis of pneumonia was made in most cases on history and physical examination; the extent of involvement was determined by x-ray; and the etiological diagnosis was made by sputum typing whenever possible. Cases of pneumonia were, so far as possible, concentrated on one ward. Nearly all cases were under the care of two physicians, a chest consultant and the ward physician in charge of the "chest ward." Specific treatment in most cases consisted of sulfonamide therapy only, but three cases received anti-pneumococcic serum. Supportive treatment, such as oxygen, digitalis, and intravenous fluids, were given freely whenever indicated. All patients were isolated, in private rooms; sulfonamide drugs were administered with sodium bicarbonate and at least 4000 cc. fluid daily by mouth or intravenously. Frequent blood sulfonamide determinations and complete blood counts were done, as well as daily urine examinations and daily physical examinations.

Thirty-two cases were admitted for the treatment of lobar pneumonia. Their ages varied from 42 to 79, the average age being 52. The distance travelled in order to get to the hospital varied from 5 to 123 miles; the average distance was 26 miles. Most of the patients were quite ill on admission—13 had consolidation of more than one lobe, the temperature averaged 102.9°, and the white blood count averaged 18,000. Since the hospital was often a long way from home, there was a strong tendency to delay entering the hospital as long as possible; in 12 cases (37.5%) the patient entered the hospital on the sixth day of the disease or later. Prognosis was modified by

*Published with the permission of the Medical Director, Veterans' Administration, who assumes no responsibility for the opinions expressed or conclusions drawn by the authors.

Received for publication January 28, 1943.

the presence of complicating diseases; there were four cases of syphilis, three cases of alcoholism, two cases of chest injury, two cases of bronchitis, and one case each of hyperthyroidism, Charcot spine, cerebral concussion, bronchial asthma, gall-bladder disease, cellulitis, scoliosis, tuberculosis, and phlebitis.

Delayed resolution occurred in eight cases, pleural effusion in four, and acute arthritis in one. Besides these complications of pneumonia, there were a number of complications resulting from the use of sulfonamide drugs; there were seven cases of secondary anemia, three cases of leucopenia, three cases of nausea, one case of drug fever, and one case of hematuria. None of these were serious. Except for nausea, all the cases of drug complications but one followed the use of the drug for seven days or longer.

Six of the patients were moribund and died within twelve hours after admission. Of the 26 who lived more than twelve hours, only one died. Nine received sulfathiazole, sixteen sulfadiazine, one no sulfonamide drug. The death occurred in a patient receiving sulfathiazole.

During the same twelve-month period fourteen persons were admitted for the treatment of broncho-pneumonia. Their ages ranged from 40 to 65; the average was 48. The distance travelled from home to hospital was from 5 to 105 miles; the average was 30 miles. Average temperature on admission was 102.2°; average white blood count was 15,400. In six cases (42.8%) the patient came to the hospital on the sixth day of disease or later. Complicating diseases consisted of three cases of trauma (two involving the chest), three cases of serious heart disease, two cases of silicosis, two cases of alcoholism, one case of syphilis, one case of tuberculosis, and one case of diabetes mellitus. There was one case of empyema and one dry pleurisy. Complications resulting from the use of the sulfonamide drugs were three cases of anemia and one case of severe toxic nephritis with anuria; in all these cases the drug had been given for over a week. Death occurred in three cases; in one case the death was due primarily to severe pre-existing heart disease, in one case to toxic nephritis, and in one case to the pneumonia itself.

SUMMARY

In a twelve-month period 46 patients were admitted for the treatment of pneumonia, and nearly all of them were treated with sulfonamide drugs. Drug treatment was complicated by albuminuria, anemia, leucopenia, nausea, and hematuria; and one case of toxic nephritis developed, resulting in death. In view of the fact that, both in this series and in others, most of the complications of sulfonamide therapy occur in cases in which the drug has been given

continuously for over seven days, it is felt that sulfonamide therapy should very rarely be continued beyond the seventh day. Leucopenia and hematuria are serious complications, and call for immediate cessation of drug treatment.

The gross mortality rate was 10 cases, or 22 per cent. However, if we exclude the 6 cases who died so soon after admission that an effective concentration of the drug could not be achieved, the mortality is 4 cases, or 10 per cent. Considering the age and otherwise unfavorable factors involved, it is not felt that such results could be obtained without sulfonamide therapy.

RESUMEN

Se recibieron 46 pacientes con neumonia durante un periodo de doce meses y casi todos ellos fueron tratados con sulfonamidas. La quimioterapia fue complicada por albuminuria, anemia, leucopenia, náusea y hematuria; y hubo un caso de nefritis tóxica que resultó fatal. En vista del hecho de que, tanto en esta serie como en otras, la mayor parte de las complicaciones del tratamiento con sulfonamidas sobrevinieron en casos en los que la droga se había administrado continuamente por más de siete días, se opina que el tratamiento con sulfonamidas no debe continuarse después del séptimo día sino en casos excepcionales. Leucopenia y hematuria son complicaciones graves y requieren la suspensión inmediata de la droga.

La mortalidad total fue de 10 casos, o sea el 22 por ciento. Sin embargo, si se excluyen los 6 casos que fallecieron en tan poco tiempo después del ingreso que no se pudo obtener una concentración eficaz de la droga, la mortalidad fue de 4 casos, o sea el 10 por ciento. Tomada en cuenta la edad y los otros factores desfavorables, se opina que no se habría podido obtener tales resultados sin el uso de las sulfonamidas.



JAY ARTHUR MYERS, M.D., F.C.C.P.

President
1944-1945

Tenth Annual Meeting

June 10-12, 1944, will long be remembered by the physicians who attended the Tenth Annual Meeting of the American College of Chest Physicians in Chicago. It was voted the best meeting which the College has thus far been privileged to present.

All of the scientific assemblies as well as the other functions of the College were well attended. The leading authorities on chest diseases assembled in Chicago to present the papers and to enter into the discussions. Some of the highlights of the meeting were: "Information Please in Medicine," "Tuberculosis in World War II," "The X-Ray Conference," and "The Symposium on Tracheo-Bronchial Tuberculosis."

Interesting papers were presented by delegates from Mexico, Peru, Chile, Venezuela and Puerto Rico. Some of these papers were read at the meeting and the others were announced by title. All of the papers have been submitted for publication in our journal, *Diseases of the Chest*.

More than 100 Fellows of the College attended the Convocation on Sunday morning, June 11, and signed the College Register. Dr. Raymond B. Allen, Dean of the University of Illinois, School of Medicine, was the toastmaster at the President's Annual Dinner Sunday night and he introduced the President and President-Elect of the College, each of whom made a brief address. Dr. Shu-Fan Li, Hong Kong, China, Governor of the College for China, also made a few brief remarks which were well received by the assembly. Dr. Chevalier L. Jackson, Chairman of the Council on Pan American Affairs of the College, introduced the members and guests of the College from the other American Republics. A special dinner was given to the delegates from the Spanish-speaking countries on Saturday night, June 10.

REGISTRATION

CHILE

Santiago
Enrique Garcia Suarez
Julio Urrutia

CHINA

Hong Kong
Shu-Fan Li

CANADA

Hamilton, Ontario
Joseph H. Lee
Ottawa, Ontario
Col. J. D. Adamson
Toronto, Ontario
George C. Anglin
H. I. Kinsey
William E. Ogden
Montreal, Quebec
Major Michael Aronovitch
Ste. Anne de Bellevue, Quebec
M. McQuitty
Regina, Saskatchewan
M. Stuart Lauder

MEXICO

Mexico City
Donato G. Alarcon
Manuel Alonso
Octavio Bandala
Jesus Maria Benitez
Antonio Cardenas Macias
I. Cosio Villegas
Miguel Jimenez
Magin Puig Solanes
Jose Angel Raynal
Leonardo Silva-E.
Guillermo Solorzano
Ricardo Tapia Acuna

PERU

Lima
Ovidio Garcia-Rosell

SOUTH AFRICA

Pretoria
P. J. Kloppers

VENEZUELA

Caracas
Gustavo Romero

UNITED STATES OF AMERICA

ALABAMA

Decatur
Erskine M. Chenault

ARIZONA

Coolidge
Capt. Peter Amazon

Phoenix

Hilton J. McKeown
Howell S. Randolph

Tucson

Benson Bloom
Charles S. Kibler

CALIFORNIA

Colfax
Robert A. Peers

Fresno

Henry A. Randel
Livermore

Gerald D. Gilbert

Loma Linda

Nile I. Reeves

Los Angeles

John W. Nevius
Morris J. Schiff
Archer J. Sokol

Monrovia

E. W. Hayes
Francis M. Pottenger

Francis M. Pottenger, Jr.

Oakland

J. Lloyd Eaton

Ontario

C. Norman Abbott

Pasadena

David T. Proctor

San Francisco

William C. Voorsanger

Harry C. Warren

COLORADO

Colorado Springs

Alexius M. Forster
Charles O. Giese

Carl S. Gydesen

Aldan M. Mullett

William C. Service

Denver

Maurice Cherny

Leroy Elrick

Lt. Col. John B. Grow

Charles Kaufman

Lt. Comdr. O. S. Levin

Capt. A. Cameron MacNeil

Harold E. Miller

Arnold Minnig

George B. Packard

Allen D. Riemer

W. Bernard Yegge

Spokane

Arthur Rest

DISTRICT OF COLUMBIA
Washington
 Major Brian Blades
 Capt. R. E. Duncan,
 (MC) USN
 W. LeRoy Dunn
 Capt. David Gould
 Col. Esmond R. Long
 Maj. Gen. S. U. Marietta
 Maj. Walter L. Nalls
 J. Winthrop Peabody
 Col. Roy A. Wolford
 J. Ross Veal
FLORIDA
Miami
 C. C. Nelson
 E. Sterling Nichol
Palm Beach
 Maj. I. W. Ginsburg
Pensacola
 Rosa L. Sullivan
St. Petersburg
 James Van D. Nelson
GEORGIA
Atlanta
 Carl C. Aven
West Point
 . Paul Wm. Auston
IDAHO
Pocatello
 Richard P. Howard
ILLINOIS
Aurora
 Kenneth G. Bulley
Bartlett
 Edwin L. Stevens
Bushnell
 R. Clark Benkendorf
Chicago
 Raymond B. Allen
 Margaret H. Austin
 Ralph Bettman
 Wm. F. Borrelli
 James T. Case
 Harry M. Crystal
 Hugo T. Cutrer
 Richard Davison
 Arthur S. Falls
 Benjamin Goldberg
 Jerome R. Head
 Paul H. Holinger
 Minas Joannides
 Louis N. Katz
 Aaron Kleinberg
 Leo Latz
 Edwin R. Levine
 Margaret Hie D. Lin
 S. Loumos
 Jacob J. Mendelsohn
 Russell H. Morgan
 A. W. Newitt
 Julius B. Novak
 T. S. Potter
 Ralph S. Rigby
 Samuel A. Schuyler
 Martin Schupmann
 Henry C. Sweany
 Willard Van Hazel
East St. Louis
 Robinson Bosworth
Hines
 Henry I. Lipson
 Arnold Shamaskin
Jacksonville
 Andrew Nady
 W. C. Reineking
Joliet
 Bernard Klein
 Edwin R. Talbot
Naperville
 Frank S. Seligson
Oak Forest
 Otto C. Schlack
Peoria
 F. C. Hammitt
 John E. McCorvie
 Fred Meixner
 Charles D. Sneller

Pontiac
 Otto L. Bettag
Rockford
 William J. Bryan
Springfield
 Robert K. Campbell
Waukegan
 Charles K. Petter
Wheaton
 Arthur S. Webb
INDIANA
Crown Point
 Philip H. Becker
 Anna Grace Seyler
Evansville
 Gardner C. Johnson
Ft. Wayne
 Harvey L. Murdock
Indianapolis
 Capt. A. C. Cohen
 James H. Stygall
 John V. Thompson
Muncie
 Thomas R. Owens
New Albany
 J. V. Pace
Richmond
 Horace Wanninger
Rockville
 H. B. Pirkle
South Bend
 Kal Freireich
 Robert B. Sanderson
IAWA
Clinton
 Capt. Lewis J. Dimsdale
Davenport
 R. P. Carney
 Glen W. Doolen
Des Moines
 James A. Downing
 John C. Parsons
Dubuque
 J. Carl Painter
KANSAS
Topeka
 Homer L. Liebert
Wichita
 A. L. Ashmore
KENTUCKY
Camp Breckenridge
 Maj. Sidney E. Wolpaw
Covington
 Charles J. Farrell
Louisville
 Paul A. Turner
 Capt. Alter Weiss
Ouwood
 Maj. Karl E. Kimber
 Major Frank Lande
Waverly Hills
 Benjamin L. Brock
LOUISIANA
Camp Polk
 Capt. O. J. Farness
New Orleans
 Sydney Jacobs
 Alton Ochsner
 I. L. Robbins
 Chester A. Stewart
Shreveport
 Peachy R. Gilmer
 Capt. J. G. Rosenbaum
MAINE
Portland
 Francis J. Welch
MARYLAND
Baltimore
 Lawrence M. Serra
 Moses S. Shiling
Bethesda
 Thelma B. Dunn
 Alphonse McMahon
Camp Ritchie
 Capt. David Shapiro

Glenn Dale
 James S. Conant
Henryton
 Reuben Hoffman
MASSACHUSETTS
Boston
 William A. Meissner
 Moses J. Stone
Brookline
 Richard H. Overholt
 Norman Wilson
Middleton
 Hubert A. Boyle
New Bedford
 James F. Brewer
Worcester
 Oscar Feinsilver
MICHIGAN
Detroit
 C. C. Birkelo
 Wm. P. Chester
 Willard B. Howes
 William A. Hudson
 Henry L. Smith
 Albert M. Wehenkel
Grand Rapids
 Paul C. Burnett
Monroe
 Cletus J. Golinvaux
Pontiac
 Constantine Mehas
 Erich Weis
MINNESOTA
Cannon Falls
 Karl H. Pfuetze
Crookston
 Rudolph E. Johnson
Minneapolis
 Ruth E. Boynton
 Herbert Burns
 J. Arthur Myers
 Norman Schneidman
 F. W. Wittich
Oak Terrace
 Sumner Cohen
 Clarence Siegel
Rochester
 H. Corwin Hinshaw
 Patrick P. T. Wu
Wadena
 W. S. Broker
MISSISSIPPI
Biloxi
 Hyman Peck
Gulfport Field
 Capt. Wm. B. Steen
Hattiesburg
 Robert E. Schwartz
Keesler Field
 Capt. Alfred L. Kruger
MISSOURI
Camp Crowder
 Maj. Linneus G. Idstrom
Fayette
 Delmar Lee Coffman
Ft. Leonard Wood
 Capt. M. M. Williams
Joplin
 Ronald L. Laney
Kansas City
 W. W. Buckingham
 Herbert L. Mantz
 Samuel H. Snider
 Orval R. Withers
Koch
 Mario Pianetto
 Samuel S. Romendick
St. Louis
 Oscar Auerbach
 John B. Devine
 I. J. Flance
 Alfred Goldman
 Evarts A. Graham
 James L. Mudd
 David M. Skilling, Jr.
 H. I. Spector

<i>Springfield</i> Elmer E. Glenn	<i>Cleveland</i> J. M. Appel	<i>TENNESSEE</i> <i>Chattanooga</i> James L. Bibb
<i>Warrensburg</i> Capt. A. E. Steer	Milton B. Cohen	<i>Franklin</i> Wm. Walter Pyle
<i>Versailles</i> W. G. Gunn	Harold G. Curtis	<i>Knoxville</i> W. Rufus Smith
NEBRASKA	Raymond C. McKay	<i>Memphis</i> Capt. Stephen M. Gelenger
<i>Lincoln</i> Terrence C. Moyer	<i>J. C. Placak</i>	Vincent D. King
<i>Omaha</i> John F. Allen	<i>Columbus</i> Casper H. Benson	<i>Nashville</i> William A. Beck
NEW JERSEY	George Curtis	James M. Pomeroy
<i>East Orange</i> Thomas J. Ormsby	Louis Mark	<i>Oakville</i> Dewey L. Anderson
<i>Glen Gardner</i> Alan J. Stolow	Myron D. Miller	TEXAS
<i>Jersey City</i> Frank Bortone	<i>Dayton</i> Lynne E. Baker	<i>Beaumont</i> M. A. Cunningham
<i>Newark</i> M. James Fine	<i>Lima</i> Lt. Henry Bachman	<i>Camp Maxey</i> Capt. David A. Nathan
Lionel A. Greco	<i>East Liverpool</i> Edward W. Miskall	Maj. Louis I. Sokol
Irving Willner	<i>Kent</i> Lena M. English	<i>Dallas</i> Elliott Mendenhall
NEW YORK	<i>Lima</i> Ernest Holsted	<i>El Paso</i> Charles M. Hendricks
<i>Batavia</i> Ephraim Korol	<i>Newark</i> R. G. Plummer	<i>Houston</i> Harry Caplovitz
<i>Buffalo</i> James H. Donnelly	<i>Oak Harbor</i> Edgar C. Baker	Alvin E. Greer
Donald R. McKay	Hubert S. Banninga	George R. Hodel
Nelson W. Strohm	Elmer E. Kirkwood	John Roberts Phillips
<i>Flushing, L. I.</i> Mortimer Schuchet	OKLAHOMA	Lucile Robey
<i>Jackson Heights, L. I.</i> Charles Cramer	<i>Oklahoma City</i> Richard M. Burke	George W. Waldron
<i>Jamaica, L. I.</i> Gertrude Silverman	OREGON	<i>Kerrville</i> Samuel E. Thompson
<i>Lockport</i> Julius Lipson	<i>Portland</i> Ralph C. Matson	<i>Legion</i> Herman Weissman
<i>Mt. Morris</i> E. Willis Hainlen	PENNSYLVANIA	<i>San Antonio</i> J. J. de Leon
<i>New York City</i> Daniel S. Cuning	<i>Allentown</i> Nathan H. Heiligman	Robert G. McCorkle
Edward P. Eggle	James E. Walmsley	James W. Nixon
Myron Herman	<i>Allenwood</i> John S. Packard	UTAH
J. George Lang	<i>Danville</i> Benjamin Schneider	<i>Brigham City</i> Capt. Elmer E. Kilpatrick
Milton Silla Lloyd	<i>Erie</i> Russell S. Anderson	<i>Salt Lake City</i> Martin C. Lindem
Charles E. Lyght	<i>Harrisburg</i> Ross K. Childerhose	VIRGINIA
George G. Ornstein	J. V. Foster	<i>Martinsville</i> Rowland H. Walker
Jerome S. Peterson	C. E. Moore	<i>Norfolk</i> R. Bryan Grinnan, Jr.
Bret Ratner	<i>Philadelphia</i> Nathan Blumberg	<i>Richmond</i> Edgar C. Harper
H. McL. Riggins	Louis Cohen	WEST VIRGINIA
Edward H. Robitzek	Chevalier L. Jackson	<i>Clarksburg</i> Leonard E. Neal
Maxwell D. Ryan	William T. Lampe	<i>Cecil O. Post</i>
<i>Oneida</i> Felix Ottaviano	Charles M. Norris	<i>Hinton</i> D. M. Ryan
<i>Rochester</i> Charles B. F. Gibbs	<i>Pittsburgh</i> Richard J. Behan	<i>Huntington</i> Walter E. Vest
<i>Salisbury Center</i> Herbert F. Schwartz	Edward Lebovitz	<i>Morgantown</i> Carl E. Johnson
<i>Schenectady</i> Arthur Q. Penta	Maj. Joseph F. Tedesco	<i>Terra Alta</i> Charles E. Smith
<i>Staten Island</i> Maurice Kovnat	<i>Reading</i> John H. Bisbing	WISCONSIN
<i>Valhalla</i> Horacio E. Perez	<i>Sharon</i> V. M. Leffingwell	<i>Bayfield</i> L. W. Moody
NORTH CAROLINA	PUERTO RICO	<i>Jefferson</i> Alfred A. Busse
<i>Asheville</i> Bert O. Edwards	<i>San Juan</i> Rafael Velazquez	<i>Madison</i> John K. Shumate
Leon H. Feldman	SOUTH CAROLINA	<i>Milwaukee</i> H. F. Ringo
Charles C. Orr	<i>Charleston</i> Fred Kredel	<i>Oshkosh</i> E. B. Pfefferkorn
<i>Hamlet</i> Claude G. Milham	Capt. Chas. D. Rosen	<i>Racine</i> Alexander Wm. Adamski
<i>Plymouth</i> Alban Papineau	<i>Columbia</i> L. Emmett Madden	Carl O. Schaefer
<i>Winston-Salem</i> George T. Harrell	<i>Spartanburg</i> Powell M. Temples	<i>Wauwatosa</i> Andrew L. Banyai
OHIO	<i>State Park</i> William H. Moncrief	Leon H. Hirsh
<i>Chillicothe</i> B. L. Chipley		George Jurgens
Maj. Arthur B. Madden		<i>Wood</i> B. L. Jones
<i>Cincinnati</i> Charles M. Siegel		

President's Address*

J. WINTHROP PEABODY, M.D., F.A.C.P., F.C.C.P.

Fellows of the College, Ladies and Gentlemen: Among the nations of the world and the races which compose them war has ever presented a singular paradox. Here the deliberate commission of acts dictated by jealousy and hate is in marked contrast to the spontaneous manifestation of sentiments of charity and mercy which ensues when angry passions have subsided and reason has resumed its sway. The impulse to maim or even to kill the enemy is succeeded by the desire to succor and to rehabilitate the stricken foe. Thus do the forces of good and evil contend for the mastery in the minds and hearts of men.

Through all the ages the physician has in time of war been called to exercise and occasionally to perfect his skill as a mender of wounds on the field of battle and a saviour of lives behind the lines. The history of military medicine as recorded by ancient and modern writers affords mute but no less eloquent evidence of the manner in which our colleagues have acquitted themselves of the obligations imposed upon them in past and present conflicts.

By comparison the global war in which we are now engaged is so infinitely greater in the magnitude of its territorial extent and range of operations than all the wars that have preceded it as to appear well nigh inconceivable by the imagination of mortal man. The enormous lists of casualties already reported and the insistent rumors of an invasion along the second front indicate the urgent need for the services of a steadily increasing number of physicians and surgeons in the armies and navies of the allied countries.

In our own land the response of members of the medical profession to the appeal of their government has been magnificent and perhaps without a parallel elsewhere. To date it is estimated generally that more than thirty per cent of our fellow practitioners have forsaken temporarily their homes, families, and other intimate ties, and have journeyed near and far to care for the sick and wounded who require their ministrations.

Our association alone has contributed a quota of 375, or about 25 per cent of its present total membership, for war service at home and abroad. In the meantime those of us who have remained behind have assumed and have borne our full share of the duties and responsibilities which have devolved upon us in consequence of the enforced absence of volunteers from our ranks.

By no means the least of these trusts is the care of the health and efficiency of civilians employed in essential industries in centers of manufacture as well as in agricultural districts. Two highly important phases of the problem which are related specifically to tuberculosis will be briefly discussed.

At the present time thousands of individuals, male and female, most of them in the very age groups in which incipient pulmonary tuberculosis is quite likely to be found, are being examined compulsorily by medical recruiting officers for admission to the armed forces. Moreover, many large commercial and industrial corporations now require a rigid physical examination of prospective employees as a necessary preliminary to the

*Presented at the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

consideration of their applications. As a result mass radiography of the chest has been accepted as a routine procedure by military as well as civil examiners. The technique of the photographic reproduction of the roentgen-ray screen on a miniature film has been developed so far that the method is regarded as entirely feasible. Films thus obtained are sufficiently detailed to reveal even very small lesions. For example, in England a comparison of over one hundred miniature films with the full sized radiographs showed that when a pathological lesion existed, its presence (if not its nature) was almost always detectible in the miniature film. This observation is in close accord with that of investigators in our own and other countries. Mass radiography is of value not only as a means for the determination of the incidence of tuberculosis, but also as an agent for the prevention of the dissemination of tuberculosis by its discovery of hidden active cases in apparently healthy populations.

The recognition of the relationship of occupation and environment to morbidity and mortality from tuberculosis has led to gradual improvement in the conditions under which the majority of the inhabitants of this and other countries live and labor. However, industrial risks coincident with intensive wartime activities in factories, shops, and similar establishments render the individuals engaged in them all the more liable to infection with tuberculosis and counsel the adoption of additional precautions. While there is little or no unemployment at present among persons able and willing to work, the equally formidable hazards of malnutrition, bad housing, faulty sanitation, and the other ills which commonly afflict the idle and indigent elements should not be neglected in any project for the effective control of tuberculosis.

During the entire period of the war the American College of Chest Physicians has continued unremittingly in its endeavors to attain the primary ideals and objectives for which it was originally organized. A survey of its more conspicuous achievements of the past few years will, it is believed, afford ample warrant for this assertion.

As we have already remarked, approximately one-fourth of our members are now serving in the armed forces of our country, many of them overseas. Several of them have been commended for meritorious conduct. Our executive office seeks to maintain communication with all who are stationed in combat areas. Copies of our journal are supplied to them whenever possible. A collection of photographs of members in the service has been assembled. Eventually it is planned to include portraits of all the members in this collection.

The last two years have witnessed a substantial increase in the membership of the College. At the outset of our administration the number of members was well over eleven hundred. One year later it aggregated between thirteen and fourteen hundred. It now approximates sixteen hundred. Every safeguard is observed in the selection of candidates for membership. All applications are closely scrutinized, and the personal and professional qualifications of prospective members are thoroughly investigated and, in the case of Fellows, verified from the results of a written examination. Indeed, we may declare without fear of contradiction that our committee on membership has been most zealous in its efforts to insure the high caliber of the men who have been admitted to membership in the College. Its success in this direction is attested to by a perusal of the roster of members. Our grateful appreciation is here expressed to its able and indefatigable chairman, Major General Shelley U. Marietta of the Medical Department of the United States Army.

The written examination for admission to fellowship in the College is conducted by a board of examiners first appointed two years ago, soon after the present administration had been inducted into office. The board in question has just concluded the third of these examinations. It is believed that the latter mark a further advance in the consistent endeavor to choose as Fellows only specialists in the front rank of their profession. A large part of the credit for the notable record thus far attained by the board of examiners belongs to its efficient chairman, Dr. George G. Ornstein.

At a recent meeting of the Committee on Membership it was proposed and resolved that the College should appoint a committee composed of certain of its members and other members at large to create and to constitute a board for the certification of eligible specialists of diseases of the chest. Under the present tentative plan the majority of the members of the board would consist of Fellows of the College, and the latter would therefore control and direct the policies and operations of the board. The board thus established would be authorized and empowered to conduct examinations of eligible applicants, and to certify candidates who qualified. In our opinion this procedure would serve as an additional guarantee of the exclusive character of the membership of the College. The activities of the board would be supported by a fund consisting of fees for certification received from candidates. Recommendations and suggestions concerning the organization and function of the board have been solicited from members of the College in general and particularly from regents and governors of the College.

Probably there are many of our members who fail to realize that although they and their confreres assemble only once annually in general convention, the aims and objects for which the College was founded are pursued most diligently all through the year by the twelve councils and committees constituted in accordance with its by-laws. The increased burdens imposed upon these committees and councils by the war indicate clearly the necessity for the appointment of subcommittees on: (a) chemotherapy, (b) nonsurgical collapse therapy, (c) surgical treatment, (d) nomenclature of diseases of the chest, (e) industrial diseases of the chest, (f) general management and rehabilitation, and other equally important divisions of our specialty. Subcommittees on public health and tuberculosis, on public relations, and on awards have also been proposed. Officials of the College are engaged in a survey of its membership with a view to the selection of the personnel of these subcommittees.

Meanwhile our sincere thanks are due to Col. Charles M. Hendricks, the chairman of the Council on Military Affairs and Public Health, and to the other members of the council, for their formulation of a comprehensive plan of post-war control of tuberculosis all over the world.

An equal meed of praise must be accorded to Dr. Edward W. Hayes, the chairman of the Council on Undergraduate Medical Education, and to his fellow members of the council, for their energetic promotion of undergraduate instruction on the subject of diseases of the chest in our medical schools.

During our administration the Council on Postgraduate Medical Education was established, and this council in turn organized a speakers' bureau. Through the agency of the latter, College chapters which hold regional meetings are able to obtain speakers to address them on certain assigned subjects so selected and arranged as to render the programs of these meetings more interesting to the participants. The council plans

to offer opportunities for postgraduate study to members now with the armed forces on their return from the war. With this object a questionnaire has been circulated among a number of members at present in the service. In addition the council proposes to cooperate with the Council on Pan American Affairs to provide postgraduate medical education in this country for physicians from our sister republics. Dr. Edward P. Eglee, the chairman of the council, and his associates also merit a generous share of the encomia bestowed upon all members of our councils.

The College now comprises twenty chapters, four of them in foreign countries and one in Puerto Rico. The fifteen domestic chapters are all affiliated with recognized state and district medical societies. Several new chapters have been added during the past two years, most of them in widely separated regions of the country. Some of these chapters incorporate in their organization groups of adjacent states, particularly in the south and the midwest. Despite difficulties of transportation and added professional burdens the attendance at chapter meetings everywhere has been reported as larger than had been expected. The interest and enthusiasm thus shown by members of chapters constitute a source of great satisfaction to officials of the College.

In connection with a campaign for an increase in the number of chapters let us remember always that the College was created to foster and maintain interest in diseases of the thoracic organs in general, and not merely in pulmonary affections, especially tuberculosis. Our cordial approbation is extended to the chairman of the recent conference of officials of chapters of the College, Dr. Minas Joannides, for his initiative in the organization of the conference and for his lucid reaffirmation of the fundamental objectives of the College.

The elaborate program presented at this meeting of the College amply attests the ability and industry of the committee on a scientific program. To its chairman, Dr. J. Arthur Myers, and to the other members of the committee, we offer our congratulations for an arduous service admirably performed. Dr. Otto C. Schlack, the chairman of the Committee on Statistics, reports that it has completed certain investigations and will publish the results in forthcoming issues of *Diseases of the Chest*. These are awaited with interest by all readers of our journal.

Under the sponsorship of Dr. James H. Stygall, one of our own Fellows, the National Council of Committees on Tuberculosis has established constituent committees in the medical societies of forty-one states and of the District of Columbia. It is confidently believed that the seven other states will soon include a committee on tuberculosis as an integral part of their respective medical societies. When the College first undertook to establish committees on tuberculosis in state medical societies, in cooperation with the council, fewer than twelve states had already organized such committees. The foregoing comparison is adduced as a measure of our progress toward this extremely important goal.

In its earnest endeavor to cement amicable relations with our neighbors to the north and south of us the Council on Pan American Affairs has enlisted the interest and obtained the support of prominent specialists in Central and South America on behalf of the aims and objects of the College. As a result chapters of the College have been organized in Cuba, Brazil, Puerto Rico and Mexico. It has been announced that a chapter has recently been formed in the Argentine Republic. Discussions with representatives from Colombia, Peru and Venezuela relative to the organization of chapters in their countries are now in progress. In

Canada, we now have twenty-nine active members and five applicants for admission. It would hardly be possible to commend too highly the unselfish devotion to the cause of international amity which has been manifested by the distinguished chairman of the Council on Pan American Affairs, Dr. Chevalier L. Jackson.

In conclusion it is felt that all who are here present will agree that this address would not be complete without its tribute to the accomplishment of the editor-in-chief of *Diseases of the Chest*, Dr. Ralph C. Matson, and his associates in the editorial office and on our editorial board. Through their incentive and under their supervision a new format was designed and adopted with the first issue of the volume for the past year. The artistic cover, the quality of the paper, the substitution of a single column for the former arrangement into two columns, the bilingual summaries appended to original contributions, and the material increase in the number of pages and of illustrations have formed the theme of complimentary expressions from readers and subscribers everywhere.

Your retiring president accounts it an extraordinary honor and privilege to have been selected to serve you during the critical period of a horrible war which has destroyed myriads of lives and obliterated cultural and moral values which are alone able to impart dignity and worth to human existence. Let eulogists who are to come applaud the deeds of heroism of our warriors at the front, and the no less valiant exploits of the combatants against disease and death in camp and hospital. *Inter arma tacent Musae!* In our own time let us pray most fervently for the early advent of a permanent peace established upon principles of equity and justice for all mankind.

Annual Meeting of Board of Regents

Stevens Hotel, Chicago, Illinois, June 10, 1944

The meeting was called to order by Dr. J. C. Placak, chairman of the Board of Regents, at 2 P. M. The following regents in addition to the chairman were present:

Dr. Andrew L. Banyai, Wauwatosa, Wisconsin
Dr. Edward P. Eglee, New York, New York
Dr. Edward W. Hayes, Monrovia, California
Dr. Charles M. Hendricks, El Paso, Texas
Dr. Charles S. Kibler, Tucson, Arizona
Dr. Louis Mark, Columbus, Ohio
Dr. Ralph C. Matson, Portland, Oregon
Dr. Jay Arthur Myers, Minneapolis, Minnesota
Dr. George G. Ornstein, New York, New York
Dr. Richard H. Overholt, Brookline, Massachusetts
Dr. J. Winthrop Peabody, Washington, D. C.
Dr. H. I. Spector, St. Louis, Missouri
Dr. Moses J. Stone, Boston, Massachusetts
Dr. James H. Stygall, Indianapolis, Indiana
Dr. Paul A. Turner, Louisville, Kentucky

Dr. William A. Hudson, Detroit, Michigan, chairman of the Board of Governors, represented the governors of the College at the meeting.

— A —

A proposed plan for establishing a Board for Diseases of the Chest was introduced by Dr. Myers, Minneapolis, chairman of the committee appointed last year to study the advisability of establishing such a board. It was proposed that the following organizations be invited to meet with a committee of the College to study plans and urge the establishing of a Board on Diseases of the Chest as an integral part of the present Board for Medical Specialties, namely:

American Heart Association
American Association for Thoracic Surgery
American Broncho-Esophagological Association
American Trudeau Society.

Should the societies mentioned above agree to join with the American College of Chest Physicians to establish a board for the specialty of diseases of the chest, steps should then be taken to incorporate this board into an independent body in accordance with the provisions established by the Advisory Board for Medical Societies, and as published in their official bulletin. Application should then be made in the proper manner to the Advisory Board for Medical Specialties for membership on the Board of Medical Specialties.

Upon motion made by Dr. Banyai, and seconded by Dr. Stone, this proposed plan was adopted by the Board of Regents, and the President was authorized to appoint a committee to represent the College in advancing this plan. The names of the members of this committee will be announced at a later date.

— B —

The report of the meeting of the Membership Committee held at the Army Medical Center, Washington, D. C., April 1, 1944, was presented by Maj. Gen. S. U. Marietta, chairman of the Membership Committee. The following proposal made by the Committee were adopted by the Board of Regents:

1. That all procedures in use by the American College of Chest Phy-

sicians which are not in writing be clarified and made of record. This appears necessary in view of the fact that certain procedures apparently are not thoroughly understood by officers and members of the College, and are not anywhere available in printed form.

2. That a legal firm in Chicago be selected by the Board of Regents to act as counsel for the College officials on a fee basis.

3. That all applicants for Fellowship in the College be required to pass a written and practical examination unless excused by the Board of Regents. This examination may be modified according to the specialty of the applicant, such as broncho-esophagology, radiology, or thoracic surgery; no other groups of specialists were considered as suitable for membership in the College.

4. That the College appoint a committee to be composed of certain of its members and others at large to create a board for certification in diseases of the chest and associated specialties, said committee to be implemented by the necessary funds for its functions.

5. Any member in any state organization who is not in good standing or who has a complaint to register, or any state organization who has any complaint to register against a member in the state organization, may do so before the Board of Regents for clarification.

6. That qualifications be altered to read as follows:

a. Qualifications for Fellowship in the American College of Chest Physicians.

(1) Applicants must be at least 29 years of age.

(2) A graduate of a grade A medical school acceptable to the Board of Regents.

(3) A member in good standing of county, state, and the American Medical Association (unless such membership is waived by the Board of Regents of the College), or of the corresponding societies of his country in case of applicants from foreign countries (again unless such membership is waived by the Board of Regents of the College).

(4) The applicant shall have had sufficient experience in diseases of the chest as evidenced by

(a) A residency in chest diseases for three years in any hospital or sanatorium having an A Classification by the American Medical Association.

(b) Membership for three years in the medical service (a visiting physician) of a hospital or institution where work is devoted to diseases of the chest, or

(c) A membership for five years in the out-patient staff of an institution or clinic devoted to diseases of the chest.

(5) He shall furnish the Board of Regents with a written statement setting forth his qualifications and fitness for becoming a Fellow of the American College of Chest Physicians.

(6) He shall pass a qualifying examination.

b. Qualifications for Associate Fellowship in the American College of Chest Physicians.

(1) Applicants must be at least 25 years of age.

(2) A graduate of a grade A medical school acceptable to the Board of Regents.

(3) A member in good standing of county, state, and the American Medical Association (unless such membership is waived by the Board of Regents of the College), or of the correspond-

ing societies in his country in case of applicants from foreign countries (again unless such membership is waived by the Board of Regents of the College).

- (4) He shall have had at least one year's training in diseases of the chest following internship, or its equivalent, and must qualify within five years for examination for a Fellowship in the College or be dropped from the membership roll.
- (5) He shall furnish the Board of Regents with a written statement setting forth his qualifications and fitness for becoming an Associate Fellow of the American College of Chest Physicians.

7. Any applicant for membership in the American College of Chest Physicians must be sponsored by two Fellows.

8. It was also recommended that the question of life membership be brought up for discussion at the meeting of the College in June.

9. It was suggested that the Council on Pan American Affairs should include as one of its members a representative from Canada.

10. It was suggested that the By-Laws should require that any Fellow who fails for three consecutive years to attend an annual meeting without good and sufficient reason may be dropped from the membership roll.

Upon motion made by Dr. Mark and seconded by Dr. Turner, the above proposals were recommended by the Board of Regents to be adopted by the College in the usual manner prescribed in the By-Laws for adoption of amendments to the College By-Laws.

It was recommended by the Membership Committee that Associate Membership in the College be discontinued, and that those presently so carried be analyzed and given an opportunity to become, if qualified, either Associate Fellows or Fellows. After considerable discussion, and upon motion by Dr. Holinger, which was seconded by Dr. Hayes, the Board of Regents voted to retain Associate Membership in the College for the present.

— C —

1. The following resolution was introduced by the Illinois Chapter of the College:

"A fundamental objective of the American College of Chest Physicians is to foster and maintain interest in all of the chest organs and to give proper service to those patients who are afflicted with diseases of the chest organs. Physicians interested in the various phases of diseases of the chest organs such as broncho-esophagologists and roentgenologists are already eligible for Fellowship in the American College of Chest Physicians. Those who are primarily interested in diseases of the heart can learn a great deal by closer association with those physicians interested in diseases of the lungs, because the two systems, namely the heart and circulation, as well as the lungs and respiration are quite intimately inter-related. In view of the possibility of enhancing the knowledge of the Fellows of the American College of Chest Physicians in the diseases of all of the chest organs, and in order that the College membership may be all inclusive and be aptly representative of the physicians who specialize in diseases of the chest, it is hereby recommended by the Membership Committee of the Illinois Chapter of the American College of Chest Physicians that a proposal be submitted to the Board of Regents of the College, at its annual meeting to be held in Chicago, June 10-12, 1944, urging that cardiologists who are able to meet the minimum require-

ments for the various memberships in the College be admitted to such memberships by the Board of Regents of the College in compliance with our present By-Laws.

Be It Resolved: That the Illinois Chapter of the American College of Chest Physicians meeting in annual session at the Palmer House, Chicago, May 16, 1944, hereby endorse this proposal and urge its adoption by the Board of Regents of the American College of Chest Physicians."

A great deal of discussion was given to this proposal, and upon a motion by Dr. Mark, and seconded by Dr. Overholt, it was voted to table this resolution.

2. The following resolution was also introduced by the Illinois Chapter of the College:

"Being that no control program for the eradication of tuberculosis can be successful without the assistance of adequately trained nurses in the care and treatment of this disease,

Be It Therefore Resolved: That the Councils on Undergraduate and Postgraduate Medical Education of the American College of Chest Physicians give consideration to the adoption of plans for improving the teaching of the proper nursing care for tuberculous patients to undergraduate and graduate nurses in all-recognized schools established for this purpose."

Upon motion by Dr. Spector, and seconded by Dr. Banyai, this resolution was adopted by the Board of Regents.

3. The Executive Council of the College sponsored the following resolution:

"Being that a large number of the College members serving with the armed forces of our country have requested a waiver of their annual dues for the duration, the budget requirements of the national organization have been substantially affected, and in order to take care of this deficit:

It Is Proposed: That the annual dues in the College to members in the United States of America be increased from \$10.00 to \$12.50 per year for the duration. This increase in dues will not apply to members of the College residing in the territories of the United States, to members of the College in foreign countries, nor to members of the College who are serving with the armed forces of our country. The dues for those members shall remain at \$10.00 per year."

Upon motion of Dr. Turner, seconded by Dr. Spector, the Board of Regents adopted this resolution.

4. The Executive Council of the College sponsored the following resolution:

"It Is Proposed: That an endowment fund be established by the Board of Regents of the American College of Chest Physicians.

It Is Further Proposed: That the amount of \$10,000 which is now invested in United States War Savings Bonds be set aside for the purpose of starting this endowment fund. Subscriptions and moneys received from sources approved by the Board of Regents of the College may be added to this endowment fund.

The principle of the endowment fund should be kept intact and the interest from the moneys invested shall be allocated by the Board of Regents of the College for honorariums in research, postgraduate and undergraduate medical education. The Board of Regents may also use the interest of this fund for the purpose of bestowing a medal or other recognition to physicians and other scientists who have made outstanding contributions in the specialty of diseases of the chest."

Upon motion by Dr. Mark, seconded by Dr. Stone, this resolution was adopted by the Board of Regents.

5. The following resolution was presented by the Texas Chapter of the College:

"It Is Proposed: That a Subcommittee on Medical Education in the State Chapters be appointed. Members affiliated with medical schools or residing in close proximity to the medical schools are to be appointed as members of this committee. The committee is to function as a subcommittee under the direction of the Councils on Undergraduate and Postgraduate Medical Education of the College.

Be It Resolved: That the Texas Chapter of the American College of Chest Physicians meeting in annual session at the State Sanatorium, Texas, on April 23, 1944, hereby endorse this proposal, and recommend its adoption by the Board of Regents of the College."

Upon the motion of Dr. Hayes, seconded by Dr. Banyai, this resolution was adopted by the Board of Regents.

6. Dr. Hayes, chairman of the Council on Undergraduate Medical Education of the College, introduced the following resolution:

"Be It Resolved: That the Council on Undergraduate Medical Education be authorized to publish a book on diseases of the chest intended primarily to advance the teaching of this subject to the undergraduate students in our medical schools.

It Is Proposed: That the book be sold at a price which would cover the cost of printing and distribution, and if need be, that the College underwrite any deficit which may be incurred in the publication and distribution of this book. The Council on Undergraduate Medical Education is accordingly authorized to proceed with the compiling of the book which is to be released as a publication of the American College of Chest Physicians sponsored by the Council on Undergraduate Medical Education, and the contents of this book shall be the sole responsibility of the Council on Undergraduate Medical Education of the College."

Upon motion by Dr. Turner, seconded by Dr. Banyai, this resolution was adopted by the Board of Regents.

7. The Executive Council of the College introduced the following resolution:

"It Is Proposed: That full credit for the number of years toward their Fellowship in the College be accorded by the Board of Regents to Associate Fellows and Associate Members who are serving with the armed forces of our country."

Upon the motion of Dr. Mark, seconded by Dr. Kibler, the above resolution was adopted by the Board of Regents.

8. The Executive Council of the College introduced the following resolution:

"It Is Hereby Proposed: That, because of war conditions, and as an emergency measure, that the By-Laws of the American College of Chest Physicians be amended to authorize the Board of Regents of the College to elect officers and other elective officials of the College at the annual meeting of the Board of Regents in the event that the regular meeting of the College is cancelled."

Upon motion by Dr. Banyai, seconded by Dr. Hendricks, the above resolution was adopted by the Board of Regents.

9. The Executive Council of the College introduced the following resolution:

"Due to the exigencies of war and the difficulty of conducting exami-

nations for prospective applicants for Fellowship who are serving with the armed forces overseas,

Be It Resolved: That the Board of Regents waive the written examinations for applicants for Fellowship serving with the armed forces overseas, provided that these applicants have met all of the other requirements for Fellowship in the College, as set forth in the College By-Laws, and that the applications have been approved by the Governor and Regent of the College for their respective state and district."

Upon motion by Dr. Stone, seconded by Dr. Hendricks, the above resolution was adopted by the Board of Regents.

10. The Executive Council of the College introduced the following resolution:

It Is Proposed: That the following committees be appointed by the President of the College and that these committees be instructed to cooperate with the National Conference on Medical Nomenclature of the American Medical Association and with the Councils and Committees of other medical societies interested in the same objectives:

- A—Committee on Nomenclature for Diseases of the Chest.
- B—Committee on the Management and Treatment of Diseases of the Chest.
- C—Committee on Occupational Diseases of the Chest.

And that such subcommittees also be appointed as may be necessary to efficiently conduct a constructive program."

Upon motion by Dr. Mark, seconded by Dr. Hendricks, this resolution was adopted by the Board of Regents.

— D —

The following recommendations were submitted by the Conference of College Chapter Officials, meeting in annual session at the Hotel Gibson, Cincinnati, Ohio, November 18, 1943:

1. *Be It Resolved:* That the Illinois Chapter of the College meeting in annual session at Chicago, Illinois, on May 18, 1943, recommend to the Board of Regents of the American College of Chest Physicians that an amendment be enacted to the By-Laws of state and district chapters of the College to the effect that the five immediate past presidents of the College chapters be constituted as an executive committee or board of directors of the chapter.

Be It Further Resolved: That the duties of the executive committee or board of directors should be to assist the officers in conducting the affairs of the chapter and to lend counsel and advice to the officers in strengthening the program for the College chapters.

2. *Be It Resolved:* That the New Jersey Chapter of the College meeting in executive session on June 18, 1943, at Newark, New Jersey, recommend the inauguration of local committees to function under the direction of the official of the chapters. The committees which are particularly recommended are:

- Membership Committee
- Program Committee
- Public Relations Committee
- Nominating Committee

The Membership Committee will function in cooperation with the Membership Committee of the national association. The Program Committee is to cooperate with the Speakers' Bureau of the Council on Post-graduate Medical Education of the College. The Public Relations Com-

mittee is to cooperate with the Board of Governors and Board of Regents of the College, as well as with established College councils and committees in order to most effectively carry out the College program in their respective states. The Nominating Committee will present the names of prospective candidates for elective offices at the annual meeting of the College chapters. The exact number of members to serve on these committees is to be left to the individual chapter.

3. *Be It Resolved*: That the Illinois Chapter of the College meeting in executive session at Chicago, September 9, 1943, recommend the following proposals for the consideration of the Board of Regents of the College:

- (a) That all hospitals, general and special, be encouraged to x-ray the chests of all patients admitted into the hospitals.
- (b) That all hospitals, general and special, be encouraged to x-ray the chests of all employees.
- (c) That a statistical survey be made to ascertain the number of hospitals which are now routinely x-raying the chests of all patients and employees.

4. It was recommended by a New Jersey delegate that in those states where chapters of the College exist, recommendations of at least two members for the office of Governor of the College in the state should be made to the national Nominating Committee by the officers and members of the College chapters.

5. It was recommended by a New Jersey delegate that the annual Conference of College Chapter officials become an annual affair starting with the present conference.

Upon a motion by Dr. Hayes, seconded by Dr. Kibler, these resolutions were adopted by the Board of Regents.

The following recommendation of the Conference of College Chapter Officials was not adopted by the Board of Regents:

Be It Resolved: That the national association be requested to collect \$2.00 in dues in addition to the national dues from each member in the states wherein there are chapters of the College, and that each College chapter be reimbursed in the amount of \$2.00 per member after the collection of annual dues by the national association.

— E —

Dr. Mark proposed the reelection of the present members of the Editorial Staff of our journal, *Diseases of the Chest*, and introduced a resolution to the effect that the Board of Regents express a vote of thanks to the members of the Editorial Board, the Editor-in-Chief of the journal, his Assistant Editors, and to the Associate and Corresponding Editors for their excellent work in bringing the College journal, *Diseases of the Chest*, up to its present high standards. This was seconded by Dr. Hayes and unanimously adopted.

Upon the recommendation of Dr. Peabody, it was proposed that a committee be appointed to prepare an oath for new Fellows of the College, and when adopted by the Board of Regents, is to be repeated by every new Fellow at each Convocation. This was seconded by Dr. Hendricks, and unanimously adopted.

The meeting adjourned at 4:15 P. M.

Board of Regents Meeting

Stevens Hotel, Chicago, Illinois, June 12, 1944

The meeting was called to order by Dr. J. C. Placak, Cleveland, Ohio, chairman, Board of Regents, and the following members were present:

Dr. Donato G. Alarcon, Mexico City, Mexico
Dr. Andrew L. Banyai, Wauwatosa, Wisconsin
Dr. Edward W. Hayes, Monrovia, California
Dr. Charles M. Hendricks, El Paso, Texas
Dr. Paul H. Holinger, Chicago, Illinois
Dr. Charles S. Kibler, Tucson, Arizona
Dr. Louis Mark, Columbus, Ohio
*Dr. Aidan M. Mullett, Colorado Springs, Colorado
Dr. Jay Arthur Myers, Minneapolis, Minnesota
Dr. William E. Ogden, Toronto, Ontario, Canada
*Dr. Charles C. Orr, Asheville, North Carolina
Dr. Richard H. Overholt, Brookline, Massachusetts
Dr. J. Winthrop Peabody, Washington, D. C.
Dr. Moses J. Stone, Boston, Massachusetts
Dr. Nelson W. Strohm, Buffalo, New York
Dr. H. I. Spector, St. Louis, Missouri
Dr. James H. Stygall, Indianapolis, Indiana
Dr. Paul A. Turner, Louisville, Kentucky
Dr. Harry C. Warren, San Francisco, California

*Alternate

Dr. William A. Hudson, Detroit, Michigan, chairman of the Board of Governors, represented the Board of Governors at the meeting.

Dr. Nelson W. Strohm, Buffalo, New York, newly elected Regent for District No. 2, and Dr. William E. Ogden, Toronto, Canada, newly elected Regent for District No. 20, were introduced.

A Certificate of Merit was presented to Dr. J. Winthrop Peabody, Washington, D. C., the retiring President of the College, by Dr. J. C. Placak, chairman of the Board of Regents.

On the motion of Dr. Kibler, seconded by Dr. Spector, Dr. Harry Warren was selected by the Board of Regents to represent the Board on the Nominating Committee.

Upon the motion of Dr. Banyai, seconded by Dr. Hendricks, Dr. Louis Mark was elected to the Executive Council of the College.

Dr. Carl C. Aven, President of the Georgia Chapter of the College, was introduced, and he presented a plan for the abstracting of articles from *Diseases of the Chest* for distribution to physicians in the general practice of medicine through the State Medical Societies. After an interesting discussion, it was proposed by Dr. Louis Mark that the plan be submitted to the Conference of College Chapter Officials for adoption and that the College chapters be encouraged to publish abstracts from *Diseases of the Chest* in their state medical journals as a part of an educational program to increase the support of physicians in the general practice of medicine. Dr. Banyai moved that this plan be submitted to the Council on Post-graduate Medical Education with instructions to devise ways and means of putting the plan into effect. This motion was seconded by Dr. Stone and unanimously carried.

The following resolution was introduced by Dr. Stone:

"Whereas, proper segregation and treatment of tuberculous insane at present is an integral part in our efforts to control tuberculosis, and

Whereas, the proper treatment and segregation of the mentally ill tuberculous patients can best be accomplished in an institution which is properly equipped and staffed for such treatment,

Be It Resolved: That the Board of Regents of the American College of Chest Physicians hereby recommend to the State Commissioner of Mental

Hospitals that as far as it is practical, a separate institution be established in each state to care for the insane tuberculous, so as to better segregate and develop a more comprehensive treatment program than can be obtained for these patients in a general mental hospital."

Upon motion by Dr. Mark, seconded by Dr. Holinger, this resolution was unanimously carried.

The following resolution was introduced by the delegation from New Jersey and passed by the Conference of College Chapter Officials earlier in the day:

"Resolved: That beginning this year, which is the tenth year of the American College of Chest Physicians, that we recommend to the Board of Regents that there be annually set aside a small sum of money or any sum designated by the Board of Regents to be used for a future home of the American College of Chest Physicians."

Dr. Mark moved that this be tabled for consideration at a future date. Dr. Stone seconded the motion and it was unanimously carried.

The following resolution was introduced by a delegation of the Illinois Chapter and adopted by the Conference of College Chapter Officials earlier in the day:

"Whereas, tuberculosis is the principal cause of death and morbidity in the woman of child bearing age, and

Whereas, mass x-rays have proven the presence of undisclosed tuberculosis in a large percentage of healthy individuals, and

Whereas, the successful treatment of co-existing pregnancy and tuberculosis can only be based on an early diagnosis of the tuberculosis when present, and

Whereas, prevention of pregnancy in women having minimal or unrecognized tuberculosis may lead to a marked reduction in the death rate from this deadly combination, therefore

Be It Resolved: By the College of Chest Physicians that serious consideration be given to furthering legislation requiring an x-ray diagnosis for tuberculosis be made a prerequisite to the issuance of a marriage certificate, or at least registration and suitable follow-up of all female applicants who show x-ray finding of tuberculosis."

Dr. Banyai moved that this be referred to the Council on Military Affairs and Public Health of the College. This motion was seconded by Dr. Kibler and unanimously carried.

The Executive Council of the College sponsored the following resolution:

"Be It Resolved: That the Board of Regents clarify the status of members of the College who have been given military ranks in the U. S. Public Health Service and the Veterans' Administration regarding the waiver of dues which is now accorded to reserve officers in the U. S. Army and Navy."

After considerable discussion, it was agreed that the waiver of dues for the present be applied only to members of the College who are serving as reserve officers with the armed forces of our country, namely, those physicians who are in the service of the U. S. Army and Navy Medical Corps. Upon the motion made by Dr. Stone and seconded by Dr. Hayes, this clarification of the status of members in the College who have been given military ranks was adopted.

It was moved by Dr. Warren and seconded by Dr. Spector that the executive secretary of the College be authorized to accept the invitations extended to him to attend the following meetings:

California Chapter
Rocky Mountain Chapter
Wisconsin Chapter
Southern Chapter

The motion was unanimously carried.

Dr. Spector moved that the Symposium on Tracheo-Bronchial Tuberculosis be published in one issue of the journal as a symposium. This was referred to the Editorial Board of the journal.

Dr. Peabody recommended that the sum of \$300.00 per year be allocated to the President of the College and to the chairman of the Board of Regents for secretarial assistance. This motion was seconded by Dr. Hayes and carried.

The Board of Regents received the news that a Chapter of the College in Argentina was organized with a great deal of enthusiasm. They were particularly pleased to learn that Dr. Gumersindo Sayago of Cordoba was elected as President of the Argentine Chapter of the College. Dr. Sayago is recognized throughout the world for his many contributions in the field of tuberculosis and other diseases of the chest, and the Board of Regents wishes to congratulate the Argentine Chapter upon his election as President.

Dr. Holinger submitted a schedule of fees for life membership in the College, and this was adopted as follows:

"The minimum fee for life membership of members having attained the age of 59 years or over—\$100.00.

58 years	\$110.00	48 years	\$210.00
57 years	120.00	47 years	220.00
56 years	130.00	46 years	230.00
55 years	140.00	45 years	240.00
54 years	150.00	44 years	250.00
53 years	160.00	43 years	260.00
52 years	170.00	42 years	270.00
51 years	180.00	41 years	280.00
50 years	190.00	40 years	290.00
49 years	200.00		

The above figures have been estimated on a 69 year life expectancy."

Dr. Stone moved that Dr. J. C. Placak be reelected as the chairman of the Board of Regents. This was seconded by Dr. Stygall, and unanimously carried.

A motion was introduced by Dr. Mark and seconded by Dr. Hendricks expressing a vote of thanks to the chairmen and members of all of the local committees who arranged and conducted the Tenth Annual Meeting of the College held at Chicago, June 10-12, 1944. A vote of thanks was expressed to the institutions and physicians who arranged various clinics from June 12-17, and a special vote of thanks was given to the members of the Entertainment Committee who sponsored the Social Hour and Cocktail Party on Sunday night, June 11, 1944. The motion was unanimously carried.

A motion was adopted expressing appreciation to the Management of the Stevens Hotel for its excellent cooperation in helping to make the meeting a success.

The meeting adjourned at 7:30 P. M.

Annual Meeting of Board of Governors

Stevens Hotel, Chicago, Illinois, June 10, 1944

The meeting was called to order by Dr. William A. Hudson, Detroit, Michigan, chairman of the board, at 10 A. M. The following governors attended the meeting:

Dr. John H. Bisbing, Reading, Pennsylvania
Dr. Benjamin L. Brock, Waverly Hills, Kentucky
Dr. Robert K. Campbell, Springfield, Illinois
Capt. Robert E. Duncan, (MC) USN, Washington, D. C.
*Dr. Sydney Jacobs, New Orleans, Louisiana
Dr. Herbert L. Mantz, Kansas City, Missouri
Maj. Gen. S. U. Marietta, M.C., Washington, D. C.
*Dr. Myron Miller, Columbus, Ohio
Dr. Jerome V. Pace, New Albany, Indiana
Dr. Jesse C. Painter, Dubuque, Iowa
*Dr. Karl H. Pfuetze, Cannon Falls, Minnesota
Dr. Carl O. Schaefer, Racine, Wisconsin
*Dr. Charles E. Smith, Terra Alta, West Virginia
Dr. Nelson W. Strohm, Buffalo, New York
*Dr. Rafael Velazquez, Bayamon, Puerto Rico
Col. Roy A. Wolford, MC, AUS, Washington, D. C.

*Alternate

All of the proposals and resolutions adopted by the Board of Regents were previously discussed by the members of the Board of Governors, and their recommendations were passed on to the Board of Regents for consideration. The question of admitting cardiologists as members of the College was favorably recommended to the Board of Regents by the Board of Governors, but after considerable discussion, the Board of Regents voted to table this proposal. The resolution was again introduced by the Conference of College Chapter Officials at their annual meeting on Monday, June 12, and a resolution will again be presented to the Board of Regents at its Midwinter Meeting to be held at St. Louis in November.

Upon motion by Dr. Campbell, seconded by Dr. Mantz, Dr. Benjamin L. Brock was unanimously elected to represent the Board of Governors on the Nominating Committee.

Upon motion by Dr. Brock, seconded by Dr. Bisbing, Dr. Hudson was unanimously reelected as the chairman of the Board of Governors for another year.

PAN AMERICAN MEMBERS HONORED AT DINNER

The Council on Pan American Affairs of the College sponsored a dinner at the Stevens Hotel, Saturday, June 10, 1944, for the members and guests of the College from the other American republics. Each delegate was introduced and called upon for a few brief remarks.

A great deal of progress has been made by all of the Latin-American countries in their campaign against tuberculosis and it is encouraging to note that still greater progress can be looked forward to in the control of tuberculosis during the next decade.

The good fellowship which exists between all of the chest specialists of the Americas will serve as the best medium for the furthering of our good neighbor policy, and these friendships will be renewed frequently at the College and other important meetings to be held in all of the Americas, both during and after the war.

Talks were also made by the officers of the College and by members of the Council on Pan American Affairs. Dr. Chevalier L. Jackson, F.C.C.P., chairman of the council, presided at the meeting.

Convocation*

J. WINTHROP PEABODY, M.D., F.A.C.P., F.C.C.P.
Washington, D. C.

Fellows of the College, New and Old, Ladies and Gentlemen: It is not my intention this morning to deliver a formal address of welcome. Therefore I shall dispense with the platitudes usually uttered on such occasions and shall present in their stead a brief account of the genesis and development of the American College of Chest Physicians and an equally succinct recapitulation of the aspirations and ideals which actuated its founders.

Very likely many of you who are about to be received into our midst are unaware of the circumstances of the origin of the College. The foster parent of our organization was the Federation of American Sanatoria, composed for the most part of private institutions owned and operated by pioneers in the study and treatment of tuberculosis in this country. Among the latter was Edward Livingston Trudeau, who in 1884 established our first sanatorium for patients with tuberculosis at Saranac Lake in the Adirondacks. Trudeau acquired his realization of the value of the therapeutic principles of absolute rest in the open air and a superabundance of nutritious foods from the experiences of Dettweiler and Walther in Germany. These two physicians were disciples of Brehmer, the reputed innovator of modern sanatoria treatment of tuberculosis, who conducted a private hospital in Silesia.

The example thus afforded by Trudeau and his associates induced other phthisiologists to open sanatoria in appropriate localities. Moreover, under the influence exerted by these forerunners a new concept of the treatment of tuberculosis gradually earned well merited recognition. Thenceforth the sanatorium was regarded not as a mere refuge for the segregation or shelter of tuberculous subjects but as an exceedingly important factor in the efficacious therapy of tuberculosis. Private sanatoria in particular proved to be admirably adapted for the specialized individual care of patients for protracted periods in a congenial and propitious environment.

During the first year of its corporate existence the Federation of American Sanatoria undertook as one of its major enterprises the publication of *Diseases of the Chest*, now the official organ of the American College of Chest Physicians. From its very inception this journal has been distinguished for the high character of its contributions to the literature on tuberculosis and other pulmonary affections. The hope of its sponsors that the periodical would serve as a potent agency for the dissemination of information in the campaign against tuberculosis has long since been fulfilled.

At the third annual meeting in the summer of 1937 the title of the Federation of American Sanatoria was changed to the American College of Chest Physicians. This action was taken in order to permit the inclusion in the organization of a number of prominent specialists of diseases of the chest who were not affiliated directly with private sanatoria. Moreover, the policy with respect to the enrollment of members

*Presented at the Convocation for Fellowship, American College of Chest Physicians, Stevens Hotel, Chicago, Illinois, June 11, 1944.

was also modified by the removal of the restriction to physicians in private practice and the extension of the privilege of membership to others who were associated with public sanatoria.

From the outset the American College of Chest Physicians adopted as its primary objective the solution of the problem of tuberculosis through the organization of a competent group of phthisiologists who would serve as a medium for the diffusion of knowledge and the creation of amicable relations between general practitioners of medicine and specialists of diseases of the lungs. The College has adhered consistently to this purpose in all its subsequent activities. A perusal of the annual reports of past presidents and other officials and of the records of the deliberations of the several boards, councils, chapters, and the communications of individual members of our organization will reveal indisputable evidence of the material progress achieved in less than a decade of endeavor.

In an autobiography which appeared shortly before his death in 1915 Trudeau described the profound sense of despair which overwhelmed him when he was informed by an elder colleague that a portion of his left lung was involved in an active tuberculous process. If this were true of a patient possessed of the prescience of a Trudeau, what must the layman unfamiliar with the possibility of a cure feel at the verdict of a positive diagnosis of pulmonary tuberculosis!

Perhaps it was the contemplation of the plight of the countless victims of a malady so generally considered the most fatal of all diseases which aroused the compassion of the founders of the federation to which we owe our origin, and inspired them with the altruistic resolve to embark upon a systematic crusade for the eventual eradication of tuberculosis. It was the consensus of opinion of the progenitors of our present organization that this end could best be attained through the inauguration of a comprehensive program of education addressed to our medical brethren as well as to the laity and designed to dispel the ignorance and prejudice concerning tuberculosis which then prevailed among both classes.

Prior to the establishment of its own journal the federation conducted its campaign of publicity in the columns of other media, professional and secular, and by means of exhibits, lectures, distribution of printed matter, display of posters, and sundry expedients of similar character. The appearance of the first issue of *Diseases of the Chest* marked a significant epoch in the history of the organization. Thereupon it became possible to communicate directly with physicians in general practice and to present to them the practical aspects of the combat against tuberculosis. According to a reliable estimate of one of our former presidents, during the first three years of publication of the journal its circulation averaged ten thousand copies monthly, the majority of which went to physicians who were not specialists of diseases of the lungs.

Meanwhile the federation continued its efforts to interest medical schools to adopt and apply a standard of instruction of undergraduates in pulmonary diseases. It also sought to establish special committees in state and county medical societies as aides in the effective presentation of the subject of diseases of the lungs to the entire medical profession of the country.

The aforescribed aims and the other objectives originally set as ultimate goals by the Federation of American Sanatoria have since been prosecuted with tireless energy and perseverance by the American College of Chest Physicians. As Fellows of the College you will be expected to assume your share of the burdens which still oppress us and of the tasks

which now confront us, all of them rendered infinitely greater and heavier by war.

May your voluntary acceptance of the duties and responsibilities which fellowship entails betoken a pledge of your fidelity to the sacred mission entrusted to our organization by a divine providence.

In the name of the officers and of my fellow members of the College I bid you welcome and godspeed!

In Memoriam*

Let us now pause in solemn reverence on behalf of those of our members who have passed through that shadowy valley which bridges this mortal life and the life of immortality that lies beyond. Once again, Valhalla has claimed its toll of true and valiant warriors. It is our prayer that their souls be comforted in this sacred haven, as their memories are deeply cherished here on earth.

The beloved Dr. John H. Peck was a past president of the College. Dr. Robert B. Homan, Sr., El Paso, Texas, was one of its founders. Dr. Frank Hall Washburn at the time of his death was governor of the College for the state of Massachusetts. Dr. Hugh A. Beam was president of the Illinois Chapter at the time of his death. Lt. Col. Hugh B. Disharoon was in active service with the U. S. Medical Corps when death claimed him.

Time permits of no further commentary, but I am sure that as the remaining names are called, there will be evoked in your memories and hearts the many achievements of their fine records.

SIMON PETER BITTNER, M.D., Glendale, California
WARREN CONRAD BREIDENBACH, M.D., Dayton, Ohio
ORVILLE HARRY BROWN, M.D., Arcadia, California
SEYMOUR J. COHEN, M.D., Chicago, Illinois
STIRLEY CASPER DAVIS, M.D., Tucson, Arizona
WILLIAM EMMETT DENMAN, M.D., Greenwood, Mississippi
ELLIOT I. DORN, M.D., Newark, New Jersey
JULIUS PETER DWORETZKY, M.D., Liberty, New York
WILLIAM C. FARMER, M.D., San Antonio, Texas
MCLEOD M. GEORGE, M.D., Denver, Colorado
WOODBURN JOHNSON HUDSON, M.D., Pleasantville, New Jersey
SMITH J. MANN, M.D., Livermore, California
FLOYD NAPOLEON MOORE, M.D., Austin, Texas
GEORGE THOMAS PALMER, M.D., Springfield, Illinois
WILLIAM GERARD PARADIS, M.D., Crookston, Minnesota
JOHN J. RANDALL, M.D., Wyncantskill, New York
JOHN L. REEVES, M.D., Philadelphia, Pennsylvania
VIRGIL E. SIMPSON, M.D., Louisville, Kentucky
ROBERT MARCUS STITH, M.D., Seattle, Washington
JOHN COX WALL, M.D., The Clinic Hospital, Eastman, Georgia

Champ H. Holmes, M.D., F.C.C.P.,
Atlanta, Georgia,
Historian.

*Presented before the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

Report of the Secretary-Treasurer*

The books of the College have been audited by the La Salle Audit Company, Chicago, Illinois, and the following report is submitted.

The cash on hand was verified by actual count and by an examination of the petty cash vouchers. The cash in bank was verified by direct communication with the First National Bank of Chicago, and by reconciling the book balance with the amount certified to by the depositary.

Following is a summary of the cash transactions for the fiscal year ended April 30, 1944:

BALANCE May 1, 1943	\$20,662.11
---------------------	-------------

RECEIPTS:

New Membership Fees and Collections

Toward Fellowships	\$ 8,445.00
Dues	14,930.00
Accounts Receivable	
Collections	\$5,969.00
Less: Discount Allowed	527.99
Chapter Funds Received	377.50
Income Taxes Withheld (Employees)	1,092.22
Miscellaneous Income	135.09

TOTAL CASH RECEIVED	30,420.82
---------------------	-----------

TOTAL CASH AVAILABLE	\$51,082.93
----------------------	-------------

DISBURSEMENTS:

Purchase of United States Savings Bonds	\$10,000.00
Purchase of Furniture and Fixtures	28.35
Chapter Funds Refunded	222.50
Income Taxes Paid (Employees)	1,117.76
Membership Certificates	252.37
Special Fund	11.00
All Other Expenses	\$18,997.52
Less: Discounts Earned	5.11
	18,992.41

TOTAL CASH DISBURSEMENTS	30,624.39
--------------------------	-----------

BALANCE APRIL 30, 1944	\$20,458.54
------------------------	-------------

The furniture and fixtures are shown on the Balance Sheet at cost.

The partial payments collected toward Fellowships, and Fellowship fees collected pending examination, are shown among the liabilities on the Balance Sheet.

The Chapter Fund accounts have been examined and it is found that a credit is due to Chapters amounting to \$160.00.

The Special Fund consists of monies received from new applicants pending acceptance of applications.

The net worth of the College has increased in the amount of \$6,654.32, which represents the net income for the year.

*Presented before the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

STATEMENT OF INCOME AND EXPENSE
YEAR ENDED APRIL 30, 1944

TOTAL INCOME	\$26,411.20
TOTAL EXPENSES	19,756.88
NET INCOME FOR YEAR	\$ 6,654.32

BALANCE SHEET—APRIL 30, 1944

ASSETS

CURRENT ASSETS:

Cash in Bank	\$20,458.54
Cash on Hand	25.00
Receivables—Reprints and Subscriptions	74.50

TOTAL CURRENT ASSETS	\$20,558.04
----------------------	-------------

INVESTMENTS—U. S. SAVINGS BONDS

10,000.00

FIXED ASSETS:

Furniture and Fixtures	1,007.48
------------------------	----------

TOTAL ASSETS	\$31,565.52
--------------	-------------

LIABILITIES AND NET WORTH

LIABILITIES:

Collections Toward Fellowships	\$ 3,910.00
Fellowship Fees Collected (Pending Exam.)	2,000.00
Special Funds	894.00
Chapter Funds	160.00

TOTAL LIABILITIES	\$ 6,964.00
-------------------	-------------

NET WORTH:

Balance May 1, 1943	\$17,947.20
Net Income for Year	6,654.32

Balance April 30, 1944	24,601.52
------------------------	-----------

TOTAL LIABILITIES AND NET WORTH	\$31,565.52
---------------------------------	-------------

During the fiscal year ended April 30, 1944, the budget was \$20,968.33 of which \$19,806.23 was expended, and a balance of \$1,162.10 was turned back into the College treasury.

The College is operating during the current fiscal year on a budget of \$24,925.00. This budget was submitted to the members of the Executive Council of the College on April 13, 1944, and approved.

ANNUAL FINANCIAL REPORT COLLEGE CHAPTERS
REPORT FOR FISCAL YEAR ENDED APRIL 30, 1944

Chapter	Cash Receipts	Cash Disbursed	Cash Balance on Hand
California	\$ 157.09	\$ 33.60	\$ 123.49
Cuba	397.00	3.00	394.25
Mexico	101.25		101.25
Missouri	54.55	4.00	50.55
New England States	33.00	13.25	19.75
New Jersey	167.14	17.30	149.84
New York State	276.25	187.05	89.20
Ohio	77.92	11.80	66.12
Pennsylvania	100.30	38.00	62.30
Southern	240.00	89.28	150.72
TOTALS	\$1,604.50	\$ 397.28	\$1,207.22

Paul H. Holinger, M.D., F.C.C.P.,
Secretary-Treasurer.

Report of the Executive Secretary*

Mr. President, Officers and Members of the American College of Chest Physicians:

Five minutes have been assigned to me to cover the activities of ten years of College progress. Accordingly, I shall be able only to touch upon a few of the highlights of College progress in this brief report.

As you know, the College is this year holding its Tenth Annual Meeting. Were it not for the war, this would be an appropriate occasion for celebration. The first ten years of any organization are the most difficult ones. We have come through this first decade with a record of which every member of this College may well be proud. We have every reason to believe that the progress made during the first ten years will be continued for many more decades to come.

Ten years ago, the first meeting to organize this society was held at Albuquerque, New Mexico. This meeting was attended by thirty-three (33) physicians from seven (7) states. A large delegation from this founding group are present at this Tenth Annual Meeting. Our present membership will be reported to you by the chairman of the Membership Committee a little later on in the program. I am certain that you will be agreeably surprised when you learn of the extent of our present membership, not only in numbers but also the vast expanse of territory in which these College members are situated. It has been aptly said that "the sun never sets on the American College of Chest Physicians."

However, we have not limited our growth to an increase in membership; we have grown in many other ways. Briefly, let me state a few instances of College progress:

*Presented before the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

1. The College has established minimum requirements for its membership.
2. Written examinations are now required for Fellowship in the College. The Board of Examiners has done an excellent job in preparing and conducting these examinations.
3. Every Fellow of the College is listed as such in the Directory of the American Medical Association by the symbol (D5).
4. The College established the first directory ever published containing a roster of its membership and designating those who were qualified as chest specialists.
5. Twenty (20) College Chapters have been organized in this and in other countries. The latest chapter to be formed is the Argentine Chapter, and this information reached us just a few days ago. These chapters, as a rule, meet with their state medical societies or with other recognized medical bodies. Scientific programs on diseases of the chest are presented before the state, district and sectional medical societies by members of the College and their invited guests. More than one hundred (100) such meetings have been held during the past ten years, and much praise is due to the officials of these College Chapters for the splendid cooperation they have given to the Executive Secretary in expediting these activities.
6. Tuberculosis Committees have now been organized in most of the State Medical Societies. Many states have also organized tuberculosis committees in their County Medical Societies to function under the direction of the State Committees.
7. Cordial relations and an exchange of ideas have been maintained with our good neighbors in the other American republics. We have many active College workers in these other countries. I want to take this opportunity to express my deep appreciation to these College officials and members who are working so diligently to expand this good fellowship. I want to pay especial tribute to our Department of Inter-American Affairs of the State Department at Washington. They have given us their fullest cooperation.
8. Our Councils and Committees have been active. Their reports will be given to you this morning by their chairmen, so I will not take the few minutes allotted to me to elaborate on their work. I only want to say in passing, that the chairmen and members of these councils and committees have done an outstanding piece of work and they deserve the praise and congratulations of the membership of your College.
9. We have cooperated closely with the Surgeons General of the United States Army and Navy Medical Departments as well as with our members who are serving with the armed forces of our country both here and abroad.
10. And finally, this report would not be complete without a few words of praise for the editor and his staff of our journal, *Diseases of the Chest*. No one works more diligently than Dr. Matson and his capable staff of assistants in getting out the type of journal of which we are all so justly proud. Articles from the journal are abstracted in the *Journal of the American Medical Association*, in many state medical journals, and in the foreign literature. More than one-half million copies of *Diseases of the Chest* have been mailed to physicians throughout the world during this ten-year period.

You have just listened to the report of the Secretary-Treasurer of the College. Despite this extensive program, we have been able to accumulate

a surplus of some \$30,000 in the College treasury. Your executive offices have been operated with a minimum of expense and neither time nor effort has been spared to maintain all of the College activities at a high level.

It is the task of your executive secretary to coordinate the various College activities. After you hear the reports from the various councils and committees this morning, I trust that you will be satisfied with what has been accomplished to date, *and if so*, your continued support of the College program is respectfully solicited.

In closing, I want to express my appreciation to the President of the College, to the members of the Executive Council, Board of Regents, and Board of Governors, to all Councils and Committees, and to the members of the Board of Examiners as well as to our office staff without whose loyal and efficient support none of these things would have been possible.

Murray Kornfeld,
Chicago, Illinois

Report of the Membership Committee*

This report covers the period of the past two years, there having been no change in College officials at the last previous meeting in November, 1943.

There is little to add to the somewhat detailed report of this committee of last November which was published in the January-February 1944 edition of *Diseases of the Chest*. In this report a survey was made of the duties of the Membership Committee and of the responsibility which devolved upon it in procuring new members, and it was pointed out that the decision as to the type of candidate to be approached by the committee was both the prerogative and the responsibility of the Board of Regents, which board decided upon the qualifications to be required for College membership.

Also the Membership Committee is not in a position to pass upon the merits of the various applicants for membership, this being the prerogative of the Board of Regents in their final action upon a recommendation of sponsors and governors; thus, although the Membership Committee is keenly alive to the fact that if the College is to become firmly established in the esteem of the medical profession of the United States, high standards for candidates are not only an essential requirement, but must be adhered to, and also that the accomplishments of the College will depend obviously upon the character of its membership which must compare favorably in all particulars with similar professional groups, it is not in a position to do more than attempt to stimulate members of the College to recommend promising candidates, and then after informing these candidates of the desirability of becoming members of the College to invite them to do so. The Membership Committee has attempted to maintain an attitude of dignified approach to the individual candidate rather than one of soliciting. In this connection it has seemed that once

*Presented before the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

having invited an individual to apply for membership in the College, we should not again extend an invitation unless some particular reason for the same should have arisen in the meantime. To press the issue by repeated invitations would seem to detract from the dignity of the College. It is preferable to gradually afford the opportunity of membership to those who seem desirous of becoming members rather than to put on a "campaign" for the purpose.

The Membership Committee has been impressed by the fact that not all of the procedures in use by the American College of Chest Physicians are in writing, and this has led to certain confusion and misunderstanding in carrying out the committee work, due to the fact that there is not a thorough understanding by officers and members of the College as to these procedures. In this connection a meeting of the Membership Committee was held at the office of the chairman, at the Army Medical Center, Washington, D. C., on 1 April 1944 for the purpose of discussion of certain of these problems. The chairman, Comdr. Robert E. Duncan, Chevalier L. Jackson, M.D., George G. Ornstein, M.D., and Col. Roy A. Wolford, U. S. A., were present. J. Winthrop Peabody, M.D., President of the College, also was present. Dr. Peabody addressed the group, emphasizing the need for exercising the utmost care in the selection of new members and mentioned an example of an unfortunate selection for Fellowship sometime past, as a result of which some unpleasantness arose.

The committee, after considerable discussion of various matters, arrived at unanimous agreements concerning them, which were put in the form of recommendations and submitted to the President of the College for his consideration and that of the Board of Regents at the meeting to be held in June, 1944. These recommendations received due consideration at the Chicago meeting, and the action taken upon them will undoubtedly appear in the report of the boards and committees concerned.

During the period covered by this report there has been a healthy and fairly rapid growth in membership, and it is believed that the representative members of this group will compare favorably with that of any other professional association in the United States. On 1 June 1942 there were 1171 members. As of 1 June 1944 there were 1605 members (1221 Fellows, 136 Associate Fellows, 248 Associate Members). Also there are pending as of the latter date 36 applications. These figures indicate an increase in membership during the two years of 434 members, or 37 per cent over our 1942 figure. Every candidate who has been admitted to the College during the last two years has been thoroughly investigated by the Board of Governors and Board of Regents of the College, and all applicants for Fellowship have been obliged to take a written entrance examination, unless excused in some individual case from doing so by the Board of Regents of the College.

It is desired to thank the members of the Membership Committee, the Governors and the Board of Regents who have submitted lists of potential members. Also it is desired to acknowledge the part played by the Executive Secretary, Mr. Murray Kornfeld, who has displayed remarkable initiative and vision and untiring energy in his assistance to the Membership Committee.

Maj. Gen. S. U. Marietta, F.C.C.P.,
Washington, D. C.,
Chairman.

Report of the Editorial Board*

Prior to January, 1943, after struggling to publish a journal of educational value to the general practitioner, *Diseases of the Chest* accomplished little more than to arouse criticism on the part of the Fellows of the College who felt that the journal was too elementary. Accordingly, the Editorial Board decided to change the format of the journal, elevate its standards and publish material of scientific interest to the members of the College rather than a type of journal of interest to the general practitioner. The change has been enthusiastically received by members of the College and others throughout the Western Hemisphere who are interested in diseases of the chest.

Prior to January, 1943, *Diseases of the Chest* was a 32-page journal published monthly. Approximately twenty pages were devoted to medical articles and two pages to College News. The other ten pages covered advertising matter. Thus, in the smaller journal, in twelve monthly issues, there were 240 pages classified as "scientific" and 24 pages of College News. In the new format, although a bi-monthly publication, there were, in 1943, 470 pages of scientific articles and 61 pages of College News. Therefore, subscribers to the journal received twice as many pages of scientific material and two and one-half times as much College News in the new journal as compared with the old. Moreover, the material published in the old journal could be classified as lost, as far as medical literature was concerned, because it was seldom referred to in the literature and almost never abstracted. The present journal is now indexed and abstracted in the current medical literature department of the Journal of the American Medical Association. It is regularly indexed by the Medical Library Association who index (but do not abstract) worthwhile medical literature in all languages. Articles published in *Diseases of the Chest* are also abstracted by many other reputable publications.

The Medical Book Review section is also a new feature of the journal which is attracting increasing interest of medical book publishers because of the frank views expressed by qualified members of the College who have been selected to review medical books.

Diseases of the Chest is a journal which is now recognized as one of the worthwhile medical publications in any language. Its success may be justly attributed to the first issue of the new format, wherein appeared a symposium on bronchiectasis arranged by Dr. Paul H. Holinger. This set a standard which had to be maintained.

I wish to express my grateful appreciation to the Executive Secretary of the College, Mr. Murray Kornfeld, who has given such splendid cooperation. I am grateful also to the Editorial Board, the Associate Editorial Board and the Corresponding Associate Editorial Board for their cooperation. I wish to express especially my appreciation to my secretary, Mrs. Marie Booth, and to Dr. Florence Brown, my Assistant Editor, for their painstaking study and counsel on every manuscript, with constant check in the Library of the University of Oregon Medical School for correctness of references and bibliographies. Grateful appreciation is also due to Dr. Antonio A. Adames for the splendid work he has done in the translating of English reviews into Spanish, which has been so much appreciated by our members in the Latin-American countries.

*Presented at the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

To maintain a good medical journal, we need good advertising, and because of the war, Mr. Kornfeld can no longer travel throughout the country seeking legitimate advertising. Our journal has been meticulous in the type of advertising accepted. We have not accepted an enormous amount of advertising material such as published in state journals throughout the country. For instance, we have not accepted advertising on contraceptive devices, which, as a matter of fact, might have a legitimate place in a journal of this type because of the relationship between pregnancy and tuberculosis.

We need the help of every member of the College to secure advertising from reputable concerns who manufacture products, medical or surgical, which will be of interest to our readers, including, of course, surgical supply manufacturers. I hope every member of the College will appoint himself an agent to secure more advertising for the journal because no medical journal can exist on its subscription revenue alone.

Ralph C. Matson, M.D., F.C.C.P.,
Portland, Oregon,
Chairman

Report of the Council on Undergraduate Medical Education*

Since the organization of the American College of Chest Physicians, one of its outstanding objectives has been to improve the methods by which tuberculosis is taught in the medical schools. It has been my privilege to be chairman of the council in charge of this work during this period. It has been felt very strongly by some of us since our student days that one of the most important and most neglected phases of the control of tuberculosis is the training of the medical student so that he will be able to play the part he must play in the field of tuberculosis.

The first efforts of this council were devoted to a survey, with as much detail as possible, as to how the subject of tuberculosis was presented to the medical students at the various medical schools. A study of the results obtained from this survey convinced us that, generally speaking, the subject was so presented that medical students graduated with no practical understanding of the factors which have to do with the control of tuberculosis and that they were no more able to meet the problem of tuberculosis after they went out to practice than they were to cope with a brain tumor.

Our study also revealed that after graduation there was very little, if any, opportunity for the young physician to familiarize himself with tuberculosis, as only one out of every twenty-four institutions that had an interne service offered an opportunity for the study of tuberculosis. Perhaps the most tragic phase of this situation was, and still is, that medical graduates, as they go out do not realize their inability to handle tuberculosis.

It is true that much has been accomplished in our anti-tuberculosis campaign. This has been accomplished largely through lay workers, together with a few physicians who have come to understand the problems

*Presented at the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

connected with the control of tuberculosis, through personal contact with the disease. What has been accomplished by this means, however, has more or less reached a saturation point and the final solution for the problem must rest to a large extent upon the shoulders of the medical profession as a whole. Tuberculosis is recognized today as both an entirely preventable and curable disease, yet it remains the most serious public health and medical problem in any community throughout our country.

In order to present something constructive to our medical schools, your council outlined a schedule for the teaching of tuberculosis. The basic principles in this schedule were, first, that the various phases of tuberculosis must be taught by teachers specially trained in that field. Secondly, that tuberculosis must be taught as it occurs, that is, over a long period; in other words, since the disease runs a long course characterized by unforeseen and unpredictable changes, the students, in order to understand the details, must have an opportunity to observe it over a long period.

Your council realizes that owing to the different conditions existing in the various medical schools that no schedule would be universally adaptable to all the medical schools. The one which was outlined was recognized as more or less idealistic and was intended to serve as a guide for the setting up of an efficient teaching system in the different schools.

It has been a great consolation to your council to know that many schools have received this outline with a good deal of enthusiasm and have made an effort to incorporate the suggestions it contained into their teaching program.

During the life of this council it has endeavored to keep in contact with the medical deans and the heads of the medical departments, as well as the heads of the departments of tuberculosis where such existed in the medical schools. Periodic reports of the work of the council as well as personal letters have been sent to the deans and to the other above mentioned personnel of the medical schools. At the same time, the members of this council and the official representatives of the College, the governors and presidents of the chapters in the different localities, have been urged to contact the medical schools in order to interest them and in order to create and maintain an interest in setting up a proper method for the teaching of tuberculosis in medical schools.

The response to this work in general has been very encouraging. When your council first attempted to contact the medical schools it was met with very little enthusiasm. At the present time a great majority of medical schools responded to all attempts to contact them. Most of the deans showed enthusiasm about the work of the College and expressed their appreciation for the efforts it is making to set up a proper system for teaching tuberculosis. Many of them have stated that they realize that the methods by which their school is teaching tuberculosis is inadequate and that they are anxious to improve it and will be pleased to meet the representatives of the College to talk over this problem. Your council has attempted to stress to the official representatives of the College that the personal contact by those who represent the College who live in the vicinity of the various medical colleges, with those who have to do with the affairs of the medical schools, is perhaps the most important factor in accomplishing this objective.

The literature on tuberculosis at the present time is so disconnected

and voluminous and medical students and recent graduates so intensely occupied that the few who do become interested in tuberculosis find themselves confused and bewildered in their endeavor to get some clear conception of the tuberculosis problem. Consequently, your council at this time proposes that the American College of Chest Physicians sponsor the publication of a textbook. The purpose of this book would be to set forth in well-chosen language in a series of short chapters the fundamental factors which have to do with the epidemiology, control, diagnosis, treatment and prevention of tuberculosis. It is proposed that the book be of a size that can be read in a few hours and that this book be available to medical students at the beginning of their junior year, and that they not only be encouraged to read it but to make it a part of their general knowledge, so that they will be able to carry through their medical course with some definite idea of the basic factors pertaining to tuberculosis and its control. On graduation they will then have at their command a working knowledge of tuberculosis, not that they will be specialists, but they will be able to think in the right terms in which they should think if they are to play the part that they *must play* in the solution of the problem of tuberculosis.

Your council realizes that to have the subject presented to medical students as it should be presented is a big undertaking. They realize that it is going to take a long time to bring about a satisfactory situation in all our medical schools. They are extremely encouraging as to what has been accomplished during the past six or seven years and they know it is only by persistent efforts whereby a more or less continuous contact with medical schools is maintained, particularly by those in close proximity to medical schools that our objective can be realized. Your council appeals to the members of the College at large and particularly to the official representatives to keep this in mind and to make every effort possible to contact those in charge of the medical schools so as to interest and encourage them in this work.

E. W. Hayes, M.D., F.C.C.P.,
Monrovia, California,
Chairman.

Report of the Council on Postgraduate Medical Education*

The report of the Council on Postgraduate Medical Education was published in the January-February, 1944, issue of *Diseases of the Chest*. There is nothing new to add at this time.

The Council on Postgraduate Medical Education urges that plans be made for postgraduate medical education for the members of the College who desire to obtain such postgraduate work upon their discharge from the various armed services of our country. The council should also continue to cooperate with the various agencies interested in arranging for postgraduate medical education for physicians from the other countries.

*Presented at the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

The Council on Postgraduate Medical Education further recommends that the "Speakers' Bureau" be enlarged and that College chapter officials and program committees avail themselves of this service.

Edward P. Eglee, M.D., F.C.C.P.,
New York, New York,
Chairman.

Report of Council on Military Affairs and Public Health*

The Council on Military Affairs of the American College of Chest Physicians was first established in June, 1940. England had just declared war upon Nazi Germany. The officials of the College were quick to see the need for the establishment of a Council on Military Affairs. This council was authorized to cooperate with the Surgeons General of the United States Army and Navy. Immediately upon the appointment of the council, a resolution was adopted offering the services of the members of the American College of Chest Physicians to the President of the United States in the event that our country might become involved in the war and a copy of the resolution was telegraphed to the President of the United States. It was not until nearly two years later that Pearl Harbor was attacked and the United States declared war upon Japan and Germany.

Our council, in the meanwhile, had completed a survey of the members of the College who might be available for military service and the results of this survey were made available to the Surgeons General of the Army and Navy. The council also conducted a survey of 100 chest specialists and 100 roentgenologists to ascertain a composite opinion as to what should be the standards for interpreting x-ray films in connection with the rejection or acceptance of officers and selectees for the armed forces. The results of the survey were forwarded to the office of the Surgeons General of the U. S. Army and Navy, and also to all members of the Tuberculosis Section of the National Research Council. In addition, questionnaires were also mailed by the American Medical Association to every physician in this country requesting more detailed information. The names of the physicians who indicated on the A. M. A. questionnaire that they were tuberculosis specialists were turned over to the Council on Military Affairs of the College by the A. M. A. for investigation and for certification. Because of the efficient organization which the College has built over a period of years, the investigation and certification of more than 2,500 names submitted to us by the American Medical Association was completed within several months and we were given to understand that other societies with fewer specialists took a considerably longer time to complete their assignments. For this the council received a letter from the American Medical Association complimenting the College upon its efficient handling of this assignment. A facsimile of this letter was published in our journal, *Diseases of the Chest*.

*Presented before the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

The chairman of your Council on Military Affairs was invited as a guest to meet with the National Research Council at Washington and at this meeting he was permitted to participate in a discussion concerning the revision of the standards then in effect which regulated the acceptance or rejection of selectees because of chest pathology. I am happy to report to you that these standards have since been altered and the examining physicians have been given greater leeway in discerning chest pathology of the selectees. The College further urged that all selectees be x-rayed upon their induction and again upon their discharge from the armed services and we are also pleased to report that this, too, has been put into effect.

In 1942, public health aspects of tuberculosis were added to our council and the name of the council was changed to the Council on Military Affairs and Public Health.

In the May-June, 1943, issue, Volume IX, Number 3, of our journal, *Diseases of the Chest*, the Council on Military Affairs and Public Health published an article entitled "Tuberculosis in Our Industrial Army: An Appeal to Management and Labor." We adopted as a slogan, "Tuberculosis Is Preventable and Curable—Put Every X-Ray Machine to Work to Find Tuberculosis." The council authorized the printing of 5,000 reprints of this article which we thought would adequately serve our purposes. A letter was mailed to the members of the Tuberculosis Committees of the State and County Medical Societies in this country informing them that copies of this reprint were available for distribution to industrial physicians and to management. We soon found that this first printing of 5,000 copies was inadequate and an additional printing of 5,000 copies was authorized. This second 5,000 did not last very long and another 10,000 reprints were then authorized. Most of these 20,000 reprints have been distributed. Requests for these reprints were received from 33 states and the District of Columbia.

Recently, a questionnaire was mailed to members of the College who are serving with the United States Navy Medical Department as reserve officers. More than 50 per cent of the questionnaires were completed and returned. These questionnaires were intended to find out the number of these physicians who desired postgraduate work after their discharge from the Navy after the cessation of hostilities, how many desired to remain in the service, the number who have positions to which they could return, and how many wanted to enter the private practice of medicine. Most of the physicians indicated that they would like to return to either their former positions or to private practice. Sixty-four per cent stated that they would desire postgraduate work after the war. Only 3 per cent expressed a desire to remain in the service. The majority of the physicians who returned the questionnaires stated that they have been assigned to chest work and that they were very happy in their assignment. Most of the men have received promotions during their tenure of service.

At a luncheon meeting this afternoon, leading officers affiliated with the various governmental agencies in this country and in Canada will bring to us the latest information on tuberculosis in World War II.

Chas. M. Hendricks, M.D., F.C.C.P.,
El Paso, Texas
Chairman

Report of the National Council of Tuberculosis Committees*

The National Council of Tuberculosis Committees is continuing in its efforts to encourage the few states that have not as yet appointed tuberculosis committees in their state medical societies to do so at an early date.

The chairmen and members of the state tuberculosis committees should take the steps necessary to have tuberculosis committees appointed in the county medical societies of their respective states.

The members of state and county tuberculosis committees should be invited to attend all College meetings, and they should in particular receive invitations to attend the College chapter meetings.

The members of the state and county tuberculosis committees can render a valuable service to the Councils on Undergraduate and Post-graduate Medical Education of the College by making the programs of these councils available to the medical schools and to the scientific program committees of their state and county medical societies. The Speakers' Bureau of the College will be pleased to furnish program committees with a list of speakers who are available to talk on subjects pertaining to diseases of the chest.

Jas. H. Stygall, M.D., F.C.C.P.,
Indianapolis, Indiana,
Chairman.

*Presented at the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

Report of the Statistical Committee*

Several years ago a questionnaire was mailed to a selected group of sanatoria in the United States in order to obtain information relative to treatment, provisions for medical personnel, and what was being done towards developing occupational therapy, vocational training, and rehabilitation for tuberculous patients in the institutions.

This report is concerned with 259 institutions who completed the questionnaire either whole or in part, with an average bed capacity of 279 beds per institution. These institutions were divided as follows: 40 Federal institutions, 48 state sanatoria, 96 county institutions, 17 city institutions, and 58 private institutions.

Patients receiving some form of collapse therapy in 1940:

Federal institutions	15%
State institutions	62 "
County institutions	44 "
City institutions	49 "
Private institutions	41 "

Patients receiving pneumothorax in 1940:

Federal institutions	10%
State institutions	37 "
County institutions	34 "
City institutions	29 "
Private institutions	34 "

*Presented at the Tenth Annual Meeting, American College of Chest Physicians, Chicago, Illinois, June 11, 1944.

Patients started on pneumothorax during 1939:

Federal institutions	9%
State institutions	27 "
County institutions	14 "
City institutions	16 "
Private institutions	22 "

Patients receiving pneumothorax less than six months:

Federal institutions	9%
State institutions	36 "
County institutions	14 "
City institutions	15 "
Private institutions	11 "

Patients receiving pneumothorax six months to one year:

Federal institutions	9%
State institutions	20 "
County institutions	10 "
City institutions	18 "
Private institutions	23 "

Patients receiving pneumothorax one to two years:

Federal institutions	15%
State institutions	16 "
County institutions	9 "
City institutions	21 "
Private institutions	8 "

Patients receiving pneumothorax for more than two years:

Federal institutions	10%
State institutions	11 "
County institutions	6 "
City institutions	13 "
Private institutions	9 "

Initial pneumothorax cases in the institutions average as follows per year:

Federal institutions	11.6
State institutions	26.2
County institutions	50.2
City institutions	122.2
Private institutions	116.5

Phrenics during the same period averaged:

Federal institutions	4.3
State institutions	63.3
County institutions	52.2
City institutions	141.5
Private institutions	34.5

Thoracoplasties during the same period averaged:

Federal institutions	6.0
State institutions	31.2
County institutions	28.2
City institutions	32.8
Private institutions	21.3

Extrapleural pneumonolysis during the same period averaged:

Federal institutions	7.0
State institutions	15.3
County institutions	5.4
City institutions	20.9
Private institutions	7.5

Extrapleural pneumothoracies averaged during the same period:

Federal institutions	5.0
State institutions	4.5
County institutions	4.2
City institutions	2.2
Private institutions	1.1

Pneumoperitoneums averaged during the same period:

Federal institutions	5.0
State institutions	7.3
County institutions	6.0
City institutions	6.3
Private institutions	1.3

Apicolysis during the same period averaged:

Federal institutions	2.8
State institutions	3.2
County institutions	4.1
City institutions	3.8
Private institutions	6.3

Bronoscopies during the same period averaged:

Federal institutions	13.5
State institutions	28.2
County institutions	42.9
City institutions	48.8
Private institutions	12.8

Average salaries for the medical directors in these institutions are shown as follows:

State institutions	\$320.00
County institutions	352.00
City institutions	430.00
Private institutions	410.00

<i>Salaries for assistant medical directors averaged:</i>		City institutions	25 "
State institutions		Private institutions	35 "
County institutions		<i>Those conducting postgraduate courses at the institutions:</i>	
City institutions		State institutions	25%
Private institutions		County institutions	7 "
<i>Salaries for resident physicians averaged:</i>		City institutions	33 "
State institutions		Private institutions	2 "
County institutions		<i>Teaching carried on in institutions other than sanatorium by the sanatorium personnel:</i>	
City institutions		State institutions	9%
Private institutions		County institutions	24 "
<i>Salaries for assistant resident physicians averaged:</i>		City institutions	55 "
State institutions		Private institutions	62 "
County institutions		<i>Those giving popular discussions before laymen:</i>	
City institutions		State institutions	100%
Private institutions		County institutions	82 "
<i>Salaries for internes averaged:</i>		City institutions	65 "
State institutions		Private institutions	60 "
County institutions		<i>Members consulted in community control problems:</i>	
City institutions		State institutions	93%
Private institutions		County institutions	82 "
<i>Of those reporting the following affiliate with medical schools:</i>		City institutions	90 "
State institutions		Private institutions	74 "
County institutions			

That part of the questionnaire concerned with Occupational Therapy, Vocational Training and Rehabilitation shows that many of the institutions have a department for occupational therapy which consists of leather work, basketry, embroidery, knitting, portable and stationary looms, sewing machines, weaving, drawing, etc.

Vocational training, in most cases, is supported by state and federal aid.

Ex-patients are employed at many of the sanatoria and their work consists of janitors, maids, waitresses, orderlies, office, laboratory, nurses, etc.

The Rehabilitation Program is making progress and many agencies are concerned with the placement of ex-patients in industry.

No evaluation has been made of these figures, and it is the consensus of opinion of the members of the Statistical Committee that before any additional surveys are undertaken that a campaign be directed to the superintendents of the institutions urging a uniform system of keeping records.

Otto C. Schlack, M.D., F.C.C.P.,
Oak Forest, Illinois,
Chairman.

Election of Officers

The Nominating Committee presented the following names for officers of the College at the Administrative Session held at the Stevens Hotel, Chicago, on the morning of June 11. The recommendations of the Nominating Committee were accepted by the assembly and the following members were unanimously elected to hold office:

OFFICERS

President-Elect: Chas. M. Hendricks, M.D., El Paso, Texas

First Vice-President: Richard H. Overholt, M.D., Brookline, Mass.

Second Vice-President: Major General Shelley U. Marietta, M.C., U.S.A., Washington, D. C.

Secretary-Treasurer: Paul H. Holinger, M.D., Chicago, Illinois

BOARD OF REGENTS

		<i>Term Expires</i>
Joseph C. Placak, M.D., Cleveland, Ohio, <i>Chairman</i>		1945
<i>Regional District</i>		
No. 1 Moses J. Stone, M.D., Boston, Massachusetts		1947
No. 2 Nelson W. Strohm, M.D., Buffalo, New York		1946
No. 4 Karl Schaffle, M.D., Asheville, North Carolina		1947
No. 5 Louis Mark, M.D., Columbus, Ohio		1946
No. 7 H. I. Spector, M.D., St. Louis, Missouri		1947
No. 9 Andrew L. Banyai, M.D., Wauwatosa, Wisconsin		1946
No. 12 Charles S. Kibler, M.D., Tucson, Arizona		1947
No. 13 Harry C. Warren, M.D., San Francisco, California		1947
No. 14 Frederick Slyfield, M.D., Seattle, Washington		1946
No. 15 Antonio Navarrete, M.D., Havana, Cuba		1946
No. 16 Gumersindo Sayago, M.D., Cordoba, Argentina		1946
No. 17 Donato G. Alarcon, M.D., Mexico City, Mexico		1946
No. 18 Affonso MacDowell, M.D., Rio de Janeiro, Brazil		1947
No. 19 J. Rodriguez Pastor, M.D., Santurce, Puerto Rico		1947
No. 20 William E. Ogden, M.D., Toronto, Canada		1947

GOVERNORS OF THE COLLEGE IN THE UNITED STATES

<i>State</i>	<i>Governor</i>	<i>City</i>	<i>Term Expires</i>
Arizona	Howell S. Randolph, M.D.	Phoenix	1947
Arkansas	Jesse Dean Riley, M.D.	State Sanatorium	1947
Colorado	Arnold Minnig, M.D.	Denver	1947
Delaware	Lawrence D. Phillips, M.D.	Marshallton	1946
District of Columbia	Wm. D. Tewksbury, M.D.	Washington	1947
Florida	M. Jay Flipse, M.D.	Miami	1947
Idaho	Orval F. Swindell, M.D.	Bolse	1947
Indiana	Jerome V. Pace, M.D.	New Albany	1946
Iowa	J. Carl Painter, M.D.	Dubuque	1946
Kansas	Arthur L. Ashmore, M.D.	Topeka	1947
Kentucky	Benjamin L. Brock, M.D.	Louisville	1946
Maine	Francis J. Welsh, M.D.	Portland	1947
Maryland	Victor F. Cullen, M.D.	State Sanatorium	1947
Michigan	*William A. Hudson, M.D.	Detroit	1947
Montana	Frank I. Terrill, M.D.	Deer Lodge	1946

Nebraska	John F. Allen, M.D.	Omaha	1946
New Hampshire	Robert B. Kerr, M.D.	Manchester	1946
New Mexico	William H. Thearle, M.D.	Albuquerque	1946
North Carolina	Merle D. Bonner, M.D.	Jamestown	1947
Ohio	John H. Skavlem, M.D.	Cincinnati	1947
Oklahoma	Robert M. Shepard, M.D.	Tulsa	1946
Oregon	James M. Odell, M.D.	The Dalles	1946
Pennsylvania	Victor M. Leffingwell, M.D.	Sharon	1946
Rhode Island	U. E. Zambarano, M.D.	Wallum Lake	1946
South Carolina	Richard K. Brown, M.D.	Greenville	1946
Texas	Charles J. Koerth, M.D.	Junction	1947
Virginia	Dean B. Cole, M.D.	Richmond	1947
Washington	John E. Nelson, M.D.	Seattle	1947
West Virginia	George R. Maxwell, M.D.	Morgantown	1947
Wisconsin	Carl O. Schaefer, M.D.	Racine	1946

*Chairman, Board of Governors (Reelected)

GOVERNORS IN U. S. POSSESSIONS

Alaska	A. H. Johnson, M.D.	Kodiak	1945
Hawaii	William F. Leslie, M.D.	Honolulu	1945
Philippine Islands	Miguel Canizares, M.D.	Manila	1946
Puerto Rico	David Garcia, M.D.	Hato Rey	1946

GOVERNORS IN U. S. GOVERNMENT SERVICES

U. S. Army	Maj. Gen. S. U. Marietta	Washington, D. C.	1947
U. S. Navy	Capt. Robert E. Duncan	Washington, D. C.	1947
U. S. Public Health Service	Herman E. Hilleboe, M.D.	Washington, D. C.	1946
U. S. Veterans Administration	Col. Roy A. Wolford, M.C.	Washington, D. C.	1946

GOVERNORS IN OTHER COUNTRIES

		<i>Term Expires</i>
Argentina	Raul F. Vaccarezza, M.D., Buenos Aires	1947
Australia	John H. Blackburn, M.D., Queensland	1945
Canada:		
Ontario	Harold I. Kinsey, M.D., Toronto	1946
Quebec	J. Albert Couillard, M.D., LaPatrie	1947
Eastern Provinces	Arthur F. Miller, M.D., Kentville, N. S.	1947
Western Provinces	Robert G. Ferguson, M.D., Fort San, Sask.	1946
Chile	Hector Orrego Puelma, M.D., Santiago	1947
China	Shu-Fan Li, M.D., Hong Kong	1947
Colombia	Carlos Arboleda Diaz, M.D., Bogota	1946
Cuba	Octavio Rivero, M.D., Havana	1945
Ecuador	Juan Tanca Marengo, M.D., Guayaquil	1946
India	Jaharlal Ghosh, M.D., Calcutta	1946
Mexico	I. Cosio Villegas, M.D., Mexico City	1945
Norway	Carl Semb, M.D., Oslo	1945
Panama	Amadeo V. Mastellari, M.D., Panama City	1946
Peru	Ovidio Garcia Rosell, M.D., Lima	1947
South Africa	David Pieter Marais, M.D., Cape Town	1945
Uruguay	Fernando Domingo Gomez, M.D., Montevideo	1947
Venezuela	Jose Ignacio Baldo, M.D., Caracas	1946

Conference of College Chapter Officials

The Second Conference of College Chapter Officials was held at the Stevens Hotel, Chicago, Monday, June 12, with Minas Joannides, M.D., chairman of the conference, presiding.

Proposals previously adopted by the conference and submitted to the Board of Regents of the College were read as approved. The proposals which were rejected by the Board of Regents were also read.

A resolution previously introduced by the Illinois Chapter of the College requesting the Board of Regents to consider favorably the admitting of qualified cardiologists to the various memberships in the College was not approved by the Board of Regents. This resolution, upon a unanimous vote of the College Chapter Conference, is to be resubmitted to the Board of Regents for further consideration.

Following the business session, the conference was addressed by Milton Sills Lloyd, M.D., New York City, who spoke on "The Chest Specialist, His Training and Services."

Alvis E. Greer, M.D., Houston, Texas, Past President of the Texas Chapter and First Vice-President of the Southern Chapter of the College, was elected chairman of the Conference. Arthur Q. Penta, M.D., Schenectady, New York, Past President and Secretary-Treasurer of the New York State Chapter of the College, was elected Secretary of the Conference.

The following College chapter officials and representatives registered:

ILLINOIS CHAPTER, No. 1

Minas Joannides, Chicago
Otto C. Schlack, Oak Forest
Arthur S. Webb, Glen Ellyn
Robert K. Campbell, Springfield
Fred M. F. Meixner, Peoria

NEW YORK STATE CHAPTER, No. 2

Arthur Q. Penta, Schenectady
Nelson W. Strohm, Buffalo
James H. Donnelly, Buffalo

NEW JERSEY CHAPTER, No. 3

Irving Willner, Newark

TEXAS CHAPTER, No. 5

Charles M. Hendricks, El Paso
Elliott Mendenhall, Dallas
Alvis E. Greer, Houston

MISSOURI CHAPTER, No. 6

Elmer E. Glenn, Springfield
William W. Buckingham, Kansas City

PENNSYLVANIA CHAPTER, No. 7

Edward Lebovitz, Pittsburgh
John S. Packard, Allentown
Russell S. Anderson, Erie
Ross K. Childerhose, Harrisburg

OHIO CHAPTER, No. 8

Myron D. Miller, Columbus
Louis Mark, Columbus

INDIANA CHAPTER, No. 9

Hubert B. Pirkle, Rockville

Guests from other countries who attended the conference were:

Ovidio Garcia-Roselli, Lima, Peru
Shu-Fan Li, Hong Kong, China

Other physicians who attended the conference were:

Charles C. Orr, Asheville, North Carolina
W. Rufus Smith, Knoxville, Tennessee
John George Lang, New York, New York
Paul A. Turner, Louisville, Kentucky
Alfred A. Busse, Jefferson, Wisconsin

SOUTHWESTERN STATES CHAPTER, No. 10

Charles S. Kibler, Tucson, Arizona
Hilton J. McKeown, Phoenix, Arizona
Howell S. Randolph, Phoenix, Arizona

MICHIGAN CHAPTER, No. 11

William P. Chester, Detroit
Willard B. Howes, Detroit

CALIFORNIA CHAPTER, No. 12

Edward W. Hayes, Monrovia
Harry C. Warren, San Francisco

NEW ENGLAND STATES CHAPTER, No. 13

Richard H. Overholt, Brookline, Mass.
Hubert A. Boyle, Middleton, Mass.
Moses J. Stone, Boston, Mass.

PUERTO RICO CHAPTER, No. 14

Rafael Velazquez, Bayamon

SOUTHERN CHAPTER, No. 16

Carl C. Aven, Atlanta, Georgia
Benjamin L. Brock, Waverly Hills, Ky.
Alvis E. Greer, Houston, Texas

MEXICO CHAPTER, No. 17

Donato G. Alarcon, Mexico City
I. Cosio Villegas, Mexico City
Octavio Bandala, Mexico City

NORTH MIDWEST CHAPTER, No. 18

J. Carl Painter, Dubuque, Iowa
John F. Allen, Omaha, Nebraska
Karl F. Pfuetze, Cannon Falls, Minn

GEORGIA CHAPTER, No. 19

Carl C. Aven, Atlanta

H. I. Kinsey, Toronto, Canada

W. E. Ogden, Toronto, Canada

Carl O. Schaefer, Racine, Wisconsin
Norman J. Wilson, Brookline, Mass.
Aidan M. Mullett, Colorado Springs, Colo.
E. Willis Hainlen, Mt. Morris, New York
Willard Van Hazel, Chicago, Illinois

COLLEGE CHAPTER NEWS

GEORGIA CHAPTER ORGANIZED

The Georgia Chapter of the College was organized at Savannah, Georgia, on May 11, 1944. The meeting was held jointly with the annual meeting of the Georgia State Medical Society. The following officers were elected for the ensuing year:

President, Carl C. Aven, M.D., F.C.C.P., Atlanta

Vice-President, Robert V. Martin, M.D., Savannah

Secretary-Treasurer, Julius C. Burch, M.D., F.C.C.P., Atlanta

ILLINOIS CHAPTER MEETING

The Illinois Chapter of the College held its annual meeting at the Palmer House on May 16, 1944, in conjunction with the annual meeting of the Illinois State Medical Society. "The Effect of Air Travel on Cardio-Respiratory Disease" was presented by the guest speaker, Colonel Arnold Dwight Tuttle, Medical Director, United Air Lines, Chicago, Illinois. The business meeting of the chapter followed a discussion of this paper, and the various committees charged with the responsibility of conducting the annual meeting of the College were presented and discussed. A number of resolutions to be presented to the annual meeting of the Board of Regents of the College were also proposed and adopted. The following officers were elected for the ensuing year:

President, Fred M. F. Meixner, M.D., F.C.C.P., Peoria

Vice-President, Julius B. Novak, M.D., F.C.C.P., Chicago

Secretary-Treasurer, Arthur S. Webb, M.D., F.C.C.P., Glen Ellyn

MICHIGAN CHAPTER MEETING

At a special meeting of the Michigan Chapter held at Detroit the following officers were elected:

President, G. L. McClellan, M.D., F.C.C.P., Detroit

Vice-President, Arthur R. Young, M.D., F.C.C.P., Pontiac

Secretary-Treasurer, William P. Chester, M.D., F.C.C.P., Detroit

The next annual meeting of the Michigan Chapter of the College will be held at Detroit, Michigan, on Thursday, September 28. This meeting will be held in conjunction with the annual meeting of the Michigan State Medical Society.

For further particulars concerning this meeting please communicate with Dr. William P. Chester, Secretary-Treasurer, Michigan Chapter, 2916 Seminole Avenue, Detroit, Michigan.

NEW YORK STATE CHAPTER MEETING

The New York State Chapter of the College held its annual meeting at the Hotel Pennsylvania, New York City, May 11, 1944, in connection with the annual meeting of the New York State Medical Society. The following officers were elected for the ensuing year:

President, James H. Donnelly, M.D., F.C.C.P., Buffalo

First Vice-President, Samuel A. Thompson, M.D., F.C.C.P., New York

Second Vice-President, Foster Murray, M.D., F.C.C.P., Brooklyn

Secretary-Treasurer, Arthur Q. Penta, M.D., F.C.C.P., Schenectady

OHIO CHAPTER MEETING

The Ohio Chapter of the College held its annual meeting on May 3, 1944, in connection with the annual meeting of the Ohio State Medical Society, at the Deschler-Wallack Hotel, Columbus, Ohio. The following program was presented:

"Treatment of Tuberculous Empyema," Karl P. Klassen, M.D., and George M. Curtis, M.D., F.C.C.P., Columbus.

Question Box, Louis Mark, M.D., F.C.C.P., Columbus.

X-Ray Conference, D. W. Heusinkveld, M.D., F.C.C.P., Cincinnati.

Dr. Myron D. Miller, Columbus, President of the Ohio Chapter of the College, presided at the meeting. Dr. Paul H. Holinger, Chicago, secretary-treasurer of the College, was a guest speaker at the annual meeting of the Ohio State Medical Society and he was a guest of the Ohio Chapter of the College at its annual meeting.

SOUTHERN CHAPTER WILL MEET AT ST. LOUIS

The Southern Chapter of the College will meet conjointly with the Southern Medical Association at St. Louis, Missouri, November 13-16, 1944. The DeSoto Hotel has been assigned as the College headquarters. All of the scientific assemblies will be held at the auditorium and two half-day sessions will be devoted to diseases of the chest. Dr. Paul A. Turner, Louisville, Kentucky, chairman of the Scientific Program Committee, announces that the following guest speakers have consented to present the following papers at this meeting:

"Primary Carcinoma of the Lung (A Ten-Year-Follow-Up)," William A. Rienhoff, Jr., M.D., Baltimore, Maryland.

"Acute Primary Diaphragmitis," Minas Joannides, M.D., F.C.C.P., Chicago, Illinois.

"Disposition of Silent Lesions," Richard H. Overholt, M.D., F.C.C.P., Brookline, Massachusetts.

"Rehabilitation of Cases After Lung Resection," Brian B. Blades, Major, M.C., Washington, D. C.

Subject to be announced, George G. Ornstein, M.D., F.C.C.P., New York, New York.

"Atypical Pneumonia Resembling Tuberculosis," Walter L. Nalls, Major, M.C., F.C.C.P., Washington, D. C.

"Chemotherapy in Tuberculosis," H. C. Hinshaw, M.D., Rochester, Minnesota.

"Dust Diseases Affecting the Lungs," Oscar A. Sander, Milwaukee, Wisconsin.

Other speakers who will appear on this program will be announced in the next issue of the journal.

There will also be an X-ray Conference held at the DeSoto Hotel in connection with the meeting. Physicians who wish to present x-ray films should communicate with Dr. Paul A. Turner, Hazelwood Sanatorium, Louisville, Kentucky.

Dr. H. I. Spector, St. Louis, Missouri, Regent of the College for the District, has been appointed chairman of the Arrangements Committee and the members of the Missouri Chapter of the College will be the hosts to the Southern Chapter of the College when they meet in St. Louis, November 13-16, 1944.

The officers and members of standing committees of the Southern Chapter of the College are:

President, Paul H. Ringer, M.D., F.C.C.P., Asheville, North Carolina
1st Vice-President, Alvis E. Greer, M.D., F.C.C.P., Houston, Texas
2nd Vice-President, Carl C. Aven, M.D., F.C.C.P., Atlanta, Georgia
Secy.-Treas., Benjamin L. Brock, M.D., F.C.C.P., Waverly Hills, Kentucky

Program Committee

Paul A. Turner, M.D., F.C.C.P., Louisville, Kentucky, *Chairman*
H. Frank Carman, M.D., F.C.C.P., Dallas, Texas
M. D. Bonner, M.D., F.C.C.P., Jamestown, North Carolina

Membership Committee

Carl C. Aven, M.D., F.C.C.P., Atlanta, Georgia, *Chairman*
Hollis E. Johnson, M.D., F.C.C.P., Nashville, Tennessee
Kellie N. Joseph, M.D., F.C.C.P., Birmingham, Alabama

Public Relations Committee

Sydney Jacobs, M.D., F.C.C.P., New Orleans, Louisiana, *Chairman*
E. Raymond Fenton, M.D., F.C.C.P., Washington, D. C.
George G. Kettlekamp, M.D., F.C.C.P., Koch, Missouri

SOCIETY OF CHEST PHYSICIANS OF VIRGINIA

The annual meeting of the Society of Chest Physicians of Virginia was held at the Hotel John Marshall, Richmond, Virginia, May 29, 1944. Following the business meeting and the presentation of x-ray films of interesting chest conditions directed by Dr. C. L. Harrell, F.C.C.P., Norfolk, Virginia, the following scientific program was presented:

"Tuberculosis Discovered in Virginia Through Selective Service Examinations," E. C. Harper, M.D., Director, Tuberculosis Out-Patient Service. Discussion opened by Capt. George W. McCall, M.C.

"The Effect of the Present World War on Tuberculosis," Frank B. Stafford, M.D., F.C.C.P., Blue Ridge Sanatorium. Discussion opened by Dean B. Cole, M.D., F.C.C.P., Richmond, Virginia.

"Pneumonectomy in Pulmonary Tuberculosis," Everett I. Evans, M.D., Richmond, Virginia. Discussion opened by M. L. White, Jr., M.D., University, Virginia.

"Indications for Terminating Pneumothorax," Elizabeth C. Cole, M.D., F.C.C.P., Norfolk, Virginia. Discussion opened by H. A. Latane, M.D., F.C.C.P., Alexandria, Virginia.

"Supervision of Pneumothorax Cases," R. H. Walker, M.D., Martinsville, Virginia. Discussion opened by T. N. Davis, M.D., Lynchburg, Virginia.

Guest speakers at the luncheon meeting were Dr. C. M. Sharp, U. S. Public Health Service, and Dr. J. Winthrop Peabody, F.C.C.P., Washington, D. C., President of the American College of Chest Physicians.

Dr. W. J. Ozlin, South Hill, Virginia, President of the society, appointed Dr. E. C. Harper, Richmond, and Dr. R. H. Walker, Martinsville, to serve on a committee with him to consider the affiliation of the society as a chapter of the American College of Chest Physicians.

ARGENTINA CHAPTER ORGANIZED

The Argentine Chapter of the American College of Chest Physicians was organized on April 29, 1944, with the official title of "Asociacion de Neumonologia Capitulo Argentino del American College of Chest Physicians," and the following officers were elected to hold office for the ensuing year:

President, Gumersindo Sayago, M.D., F.C.C.P., Cordoba

Vice-President, Raul F. Vaccarezza, M.D., F.C.C.P., Buenos Aires

Secretary-Treasurer, Juan Carlos Rey, M.D., F.C.C.P., Buenos Aires

The Argentine Chapter is the twentieth chapter of the College to be organized.

BRAZILIAN CHAPTER MEETING

The Brazilian Chapter of the American College of Chest Physicians held a meeting at Rio de Janeiro on December 22, 1943:

The meeting was called to order by Dr. Samuel Libanio, President of the chapter. Dr. Libanio made a brief talk concerning the aims and objectives of the chapters of the College. Dr. Affonso MacDowell, Regent of the College for Brazil, was introduced and he, too, stressed the need for a close cooperation between the Brazilian Chapter and chapters of the College in all of the other countries. A letter extending an invitation to the members of the Brazilian Chapter of the College to attend the annual meeting of the American College of Chest Physicians to be held in Chicago, Illinois, U. S. A., in June, 1944, was read by Dr. Affonso MacDowell Filho, and it was agreed to send a delegate to the annual meeting of the College provided transportation could be arranged. It was also agreed to adopt the plan advanced by the Executive Offices of the College to increase the membership of the Brazilian Chapter of the College in the various Brazilian states.

After the business meeting the following scientific program was presented:

"Treatment of Empyema by Intrapleural Injection of Urea Solution," Roberto Pereira, M. D.

"Results of Systematic Early Pneumolysis," Carvalho Ferreira, M.D.

"Compression Pneumothorax in Unestablished Symphysis by Post Abrupt Reexpansion," Affonso MacDowell Filho, M.D.

The above papers were discussed by Drs. Affonso MacDowell, Samuel Libanio, Carvalho Ferreira, Olimpio Gomes, MacDowell Filho, Aresky Amorim, Roberto Pereira, and Castello Branco.

DR. PEABODY HONORED BY CHILEAN SOCIETY

Dr. J. Winthrop Peabody, Washington, D. C., immediate past president of the College, was elected an honorary member of the Sociedad Chilena de Tisiologia at a meeting of the society held at Santiago, Chile, on March 27. Notification of his election as an honorary member was sent to him by Prof. H. Orrego Puelma, President of the Sociedad Chilena de Tisiologia. A special diploma of honorary membership was mailed to Dr. Peabody.

CUBAN CHAPTER MEETING

The Cuban Chapter of the College held a meeting at the Instituto de Vias Respiratorias, Havana, Cuba, on February 15, 1944. The following scientific program was presented:

"Clinical Importance of the Evaluation of the Respiratory Function," Julio Morera Carbonell, M.D.

"Experimental Action of a B.C.G. Extract," Pedro Domingo, M.D.

"A B.C.G. Extract for Intra-dermal Test in Man—A Comparison with P.P.D." Francisco J. Menendez, M.D., F.C.C.P., and Rafael Ballesteros, M.D.

Report of clinical cases.

Dr. Mendoza Receives "Joaquin Martos Award"

Dr. Rene Garcia Mendoza, an Associate Member of the Cuban Chapter, has obtained the "Joaquin Martos Award" for the present year. This award, instituted by the National Council of Tuberculosis of Cuba, in memory of the late Dr. Joaquin Martos, is granted for the best work presented on a phthisiological subject.

PERU TO ORGANIZE COLLEGE CHAPTER

Dr. Ovidio Garcia-Rosell, F.C.C.P., Lima, Peru, Governor of the College for Peru, arrived in the United States on June 5 to attend the Tenth Annual Meeting of the College.

Dr. Garcia-Rosell brought with him sixteen applications for membership in the College, all of whom have been approved by the Board of Regents. Listed below are the new members of the College in Peru:

Callao, Peru

Dr. Luis E. Hubner

Lima, Peru

*Dr. Horacio Cachay Diaz

*Dr. Roman del Castillo

Dr. Juan M. Escudero Villar

Dr. Maximo Espinoza Galarza

*Dr. Andres Flavio Guadalupe

Dr. Juan A. Macchiavello

Dr. Leopoldo Molinari

*Dr. Angel Luis Morales A.

*Dr. Victor Narvaez

Dr. Mario Pastor

*Dr. Jorge Rene Sarmiento

Dr. Victor Manuel Tejada

*Dr. Humberto G. Valderrama

Dr. Ramon Vargas Machuca

Dr. Juan Alfredo Werner

*Associate Member.

Dr. Dagoberto E. Gonzalez, Lima, who recently visited the United States of America is also a Fellow of the College.

Dr. Garcia-Rosell is at present visiting important institutions concerned with the treatment of tuberculosis in this country. Upon his return to Peru, he will take the necessary steps to organize the Peruvian Chapter of the American College of Chest Physicians.

COLLEGE NEWS

NEW APPOINTMENTS

Dr. Jay Arthur Myers, F.C.C.P., president of the College, announces the following appointments:

Dr. Chas. J. Koerth, F.C.C.P., Kerrville, Texas, to complete the unexpired term as Regent of the College for District No. 11, formerly held by Dr. Chas. M. Hendricks, F.C.C.P., El Paso, Texas, who was elevated to the office of president-elect at the Chicago meeting of the College. Dr. Joseph McKnight, F.C.C.P., Sanatorium, Texas, was appointed as the Governor of the College for the state of Texas to fill the unexpired term left vacant by Dr. Koerth.

Dr. George Foster Herben, F.C.C.P., Yonkers, New York, was appointed to complete the unexpired term of Dr. Nelson W. Strohm, F.C.C.P., Buffalo, New York, as Governor of the College for New York State. Dr. Strohm was elected Regent of the College for District No. 2 at the Chicago meeting of the College.

Members of the College appointed to serve on councils and committees will be announced in the next issue of the journal.

CANADA HONORED BY COLLEGE REGENCY

Dr. Wm. E. Ogden, F.C.C.P., Toronto, Canada, who has served as Governor of the College for Canada during the past three years, has been elevated to the office of Regent of the College. Through his untiring efforts, the membership of the College in Canada has been materially increased. Most of the important chest specialists in Canada have applied for membership in the College and it is gratifying to report that the newly established District Governors will assist the Regent in passing upon new applications. The following Fellows of the College were elected at the Chicago meeting to serve as Governors of the College for Canada:

Eastern Provinces, Arthur F. Miller, M.D., F.C.C.P., Kentville, N. S.

Quebec, J. Albert Couillard, M.D., F.C.C.P., LaPatrie

Ontario, Harold I. Kinsey, M.D., F.C.C.P., Toronto

Western Provinces, Robert G. Ferguson, M.D., F.C.C.P., Fort San., Sask.

DAN MAHONEY, M.D., F.C.C.P., was installed as president of the Arizona State Medical Society at the annual meeting held at Phoenix.

CHEVALIER L. JACKSON, M.D., F.C.C.P., presented a paper on "Inter-American Relations in Otolaryngology" at the 66th Annual Meeting of the American Laryngological Association, held at the Waldorf-Astoria Hotel, New York City, June 7-8.

WILLIAM F. REINHOFF, M.D., presented a paper on "Indications for Pneumonectomy" at the monthly meeting of the Schenectady County Medical Society held at the Glenridge Sanitarium, Schenectady, New York, on May 2.

DEAN B. COLE, M.D., F.C.C.P., is scheduled to present a paper on "Modern Diagnosis and Treatment of Pulmonary Tuberculosis" at the Wartime Graduate Medical Meeting to be held at the Station Hospital, Langley Field, Virginia, on June 6.

PAUL H. HOLINGER, M.D., F.C.C.P., was a guest speaker at the 63rd Annual Meeting of the South Dakota State Medical Association held at Huron, South Dakota, May 21-23. Dr. Holinger showed motion pictures on "Indications for Bronchoscopy in Pulmonary Disease."

THOMAS J. KINSELLA, M.D., F.C.C.P., was elected as treasurer of the Minneapolis Academy of Medicine.

**DR. THOMAS APPOINTED SUPERINTENDENT OF
W.O.W. SANATORIUM**

Dr. Harry P. Thomas, F.C.C.P., has been appointed superintendent of the Woodmen of the World Sanatorium, San Antonio, Texas. He succeeds Dr. Augustus D. Cloyd, Sr., Medical Director of the Woodmen of the World, who has been acting superintendent for five months.

PINE CREST SANATORIUM BECOMES STATE SANATORIUM

The Pine Crest Sanatorium, Oshtemo, Michigan, owned and operated by Dr. Benjamin A. Shepard, F.C.C.P., as a private sanatorium for the treatment of tuberculosis since 1919, has been sold to the State of Michigan and it will be known as the Pine Crest State Sanatorium. Dr. Shepard has recently retired because of ill health.

COURSE IN ELECTROCARDIOGRAPHY

Dr. Louis N. Katz, director of cardiovascular research, Michael Reese Hospital, Chicago, Illinois, will conduct a course in electrocardiography from August 21-September 2. Emphasis in the course will be placed on chest leads and on the importance of the electrocardiogram in coronary sclerosis and myocardial infarction. The course is open to beginning and advanced students in electrocardiography. For further particulars write to the Cardiovascular Department, Michael Reese Hospital, 29th Street and Ellis Avenue, Chicago, Illinois.

OBITUARIES

WILLIAM CARLTON FARMER**1866-1944**

Dr. William Carlton Farmer died April 5, 1944, after an illness of several months. He was born December 6, 1866, in Bloomington, Indiana, and graduated from the Hospital College of Medicine, Louisville, Kentucky, in 1891. Dr. Farmer practiced medicine in Louisville until 1905 when he moved to San Antonio, Texas, because of impaired health.

For a number of years following World War I, he was a member of the Board of Directors of the Texas Tuberculosis Association, and in 1930 served as president of the state association. He served as a member of the executive committee and board of directors of the Bexar County Tuberculosis Association, and was elected an Honorary Life President of that organization in 1938.

Dr. Farmer was a delegate to the Sixth International Congress for the prevention and the cure of tuberculosis at Washington, D. C., 1908, and a member of the International Union Against Tuberculosis, and attended the meetings of that organization held at Washington in 1926, in Rome 1928 and at Oslo, Norway, in 1930.

He was a member of the Bexar County Medical Society, Texas State Medical Association, American Medical Association, and a Fellow of the American College of Chest Physicians.

Dr. Farmer is survived by his widow, Mrs. Ellen Cook Farmer of San Antonio; a daughter, Mrs. Katherine Mitchell of Denver, Colorado, and a granddaughter, Cynthia Mitchell, also of Denver.

Charles J. Koerth, M.D., F.C.C.P.
Governor for Texas

VIRGIL E. SIMPSON**1875-1944**

Virgil E. Simpson died on May 4, 1944, of a heart ailment following a speech to the First District Nurses' Association at Louisville, Kentucky. Dr. Simpson was born in Jefferson County, Kentucky, May 11, 1875. He graduated from the University of Louisville School of Medicine in 1900, and served on the teaching staff of that school since 1902. Following his internship at the Louisville City Hospital 1900-01, he took postgraduate medical work at the University of Toronto, Harvard University, Massachusetts General Hospital and Johns Hopkins Hospital.

Dr. Simpson served as a major overseas in World War I and during the Mexican Border disturbance in 1916-17. Dr. Simpson was a member of the Jefferson County Medical Society, Kentucky State Medical Association, Southern Medical Association, American Medical Association, American Heart Association, American Gastroenterological Association, American College of Physicians, and the American College of Chest Physicians.

He is survived by his wife, the former Miss Della Aldridge.

Benjamin L. Brock, M.D., F.C.C.P.
Governor for Kentucky

McLEOD M. GEORGE

1865-1943

McLeod M. George, a charter member of the American College of Chest Physicians, died at his home, Melroza, near Denver, Colorado, on October 30, 1943. Dr. George was born in Beaver Falls, Pennsylvania, in 1865. He graduated from the University of Pennsylvania School of Medicine, and started the practice of medicine in Pittsburgh. Because of ill health Dr. George moved to Denver where he continued the practice of medicine until 1914, when he became affiliated with the Bethesda Sanatorium. In 1921, he was appointed Superintendent and Medical Director of that institution, which position he held until his retirement in 1941.

Dr. George was at one time the Editor of the Colorado Medical Journal. He was a member of the Denver Sanatorium Association, a Fellow of the American Medical Association, and a Fellow and charter member of the American College of Chest Physicians.

Dr. George is survived by his wife, Mrs. Mary De Boer George.

Arnold Minnig, M.D., F.C.C.P.
Governor for Colorado

BOOK REVIEW

The Evolution of Tuberculosis as Observed During Twenty Years at Lymanhurst: Minneapolis Board of Public Welfare. Price, \$2.50. Minnesota Public Health Association, 11 West Summit Avenue, Saint Paul, Minnesota, April, 1944.

This book covers an even greater field than is implied by its title. In 255 pages it has, besides outlining the evolution of tuberculosis, succeeded in giving an historical, clinical and epidemiological account of the twenty years of tuberculosis research at Lymanhurst. Since 1920, when Dr. F. E. Harrington worked out the Lymanhurst plan for Minneapolis and selected Dr. J. A. Myers as its medical director, these two men have shared alike a common urge to reach the objective originally planned.

The book stands as a history of a project that is satisfying in its prospectus, its execution, and particularly in its fulfillment. It is of historical and epidemiological value, since the work of Lymanhurst has made many contributions to our knowledge of tuberculosis. It has pioneered in techniques necessary to accomplish important tuberculosis control work. It recognized at once the need to provide roentgenograms at minimal cost. The Lymanhurst group felt that early diagnosis campaigns could have little value unless roentgenograms could be made available to everyone. At the same time they strenuously opposed attempts to diagnose by x-ray alone, as they have shown that the x-ray is only one phase of an examination. They employed various methods of controlling tuberculosis in a community, such as examinations of contacts and other special groups, but came to the conclusion that the only satisfactory method consists of testing with tuberculin everyone in a community, making x-ray film inspections of the reactors, examining those with shadows to determine etiology of lesions, and managing those with clinical tuberculosis so as to prevent them from disseminating tubercle bacilli and restoring their health as soon as possible. They pioneered in the movement to discontinue preventoriums as a part of the sanatorium program. It was

agreed almost from the beginning that children with the first infection type of tuberculosis should remain at home under supervision. Their observations proved that such children did as well as those who were institutionalized.

The usefulness of the intradermal tuberculin test was recognized from the first. The Lymanhurst group championed the value of tuberculin not only because of its usefulness at the time but its promise to be of increasing value in the future. With a decreasing incidence of infection, the tuberculin test is now proving to be of great diagnostic value. One cannot refrain from reminiscing back over the early days of the work at Lymanhurst, when it was almost a challenge to work toward a day when the therapy of tuberculosis would be confined to those diagnosed by the tuberculin test. Treatment through rest or chemotherapy, identification of the source of infection with the removal of such a source, and conversion of the tuberculin from positive to negative would constitute the recognized treatment of tuberculosis. Twenty years ago such a dream seemed quite unreal. Today, through the unceasing interest and energy put into this project by its sponsors the fulfillment of such a dream has been moved into our line of vision, possibly much closer to reality than we suspect.

The tables and graphs in the book are of special interest to the epidemiologist. The twenty years are divided into four five-year periods, each of which is analyzed separately. The breakdown changes from negative to positive reactions, and deaths are considered separately in the five-year periods. Table number Fifty gives a resumé of the tuberculin test as a gauge for testing the efficiency of control measures in any community. The graphs are all interesting and of value, particularly Nine and Ten, which show the decrease in tuberculosis deaths among children in Minneapolis during the twenty-year period.

The book describes the results of observations on such a large number of persons over such a long period of time that from it one obtains a perspective of all the fundamentals in the diagnosis, treatment and prevention of tuberculosis. It is of definite value to every tuberculosis worker.

Dr. H. A. Burns
Minnesota

THIRTY-EIGHTH ANNUAL MEETING SOUTHERN MEDICAL ASSOCIATION

St. Louis, Missouri—November 13-16, 1944

SECOND ANNUAL MEETING SOUTHERN CHAPTER AMERICAN COLLEGE OF CHEST PHYSICIANS

St. Louis, Missouri—November 13-16, 1944

College Headquarters: DeSoto Hotel, St. Louis, Missouri.
Make arrangements for your hotel rooms now. Transportation should be arranged 30 days in advance of the meeting dates.